

SUBJECT INDEX FOR VOLUME 45

A

- Acetylcholine receptor, *see also* Muscarinic acetylcholine receptor; Nicotinic acetylcholine receptor
 α_7 subunit of (human), 546
- Acetylcholinesterase
 conformers of (*Electrophorus electricus*), 74
 huperzine A binding to (human), 555
 peripheral site ligands on (*Torpedo* and chicken), 335
- Acrolein, aldose reductase-catalyzed reduction of (human), 797
- Adenosine receptor
¹²⁵I-4-aminobenzyl-5'-N-methylcarboxyamidoadenosine as radioligand for (rat), 978
 cAMP accumulation and phospholipase and arachidonate release and, in Chinese hamster ovary cell, 1036
 desensitization of (dog), 1082
¹²⁵I-azido-PAPA-APEC labeling of (dog), 871
 intracellular calcium and, in erythroleukemia cell (human), 1160
 ligand binding of (dog), 861
 structure-activity relationships for (rat), 1101
- Adenosine triphosphate, signal transduction induced by, in NG108-15 cells, 532
- Adenosine triphosphate receptor, desensitization of (bovine), 731
- Adenovirus, thyrotropin-releasing hormone receptor in, cell-specific desensitization of (mammal), 684
- Adenylate cyclase
 halothane sensitization of (human), 380
 secretin receptor coupling to, in Chinese hamster ovary cell, 1022
- Adenylyl cyclase
 agonist stimulation of, β -adrenergic receptor and (human), 481
 pituitary somatostatin receptor subtype inhibition of (rat and human), 402
 somatostatin receptor coupling to, by G protein (hamster), 587
- Adipocyte, fatty acid-binding protein gene in, pioglitazone response element in (human), 439
- Adrenal chromaffin cell, G protein-activated K⁺ current in (bovine), 109
- α_1 -Adrenergic receptor
 in prostate, smooth muscle contraction and (human), 703
 subtypes of (human), 171
- α_1 B-Adrenergic receptor, voltage-dependent calcium influx and, in thyroid carcinoma cell (rat), 591
- α_2 -Adrenergic receptor
 binding of, estradiol and (rat), 509
 G protein coupling to, ligand structure and (human), 696
 precoupling of (rat), 524
- α_2 A-Adrenergic receptor, G protein coupling to, in phospholipid vesicles, 1071
- α_2 C-Adrenergic receptor, norepinephrine release and, in kidney (human), 1168
- α_2 C-Adrenergic receptor clone, in kidney cell (opossum), 176
- β -Adrenergic receptor
 adenylyl cyclase stimulation and (human), 481
 mutated, intact cell binding properties of (hamster and human), 255
- β_2 -Adrenergic receptor
 antagonists of, inverse agonist activity of (human), 490
 negative antagonists at (hamster), 390
- Alcohol
 heat shock response and cytotoxicity to, in glioma cells (rat), 36

- nicotinic acetylcholine receptor and, 1235
- Aldose reductase, acrolein reduction and (human), 797
- p-Alkoxyphenols, ribonucleotide reductase inhibition by (mouse and *Escherichia coli*), 792
- γ -Aminobutyric acid/benzodiazepine receptor
 in brain, flurazepam and (rat), 657
 uncoupling of (mammal), 618
- γ -Aminobutyric acid receptor
 cysteine loop of, mutational analysis of (*Xenopus*), 317
 ligand-binding properties of (rat), 810
 multiple α -subunits of (human), 475
 subunits of,
 coexistence of, in brain (rat), 1061
 glutamate induction of (rat), 637
- L-2-Amino-4-phosphonobutyric acid, metabotropic glutamate receptor activation by (rat), 367
- Aminopyridine, potassium channel block by (mammal and *Xenopus*), 1242
- Amyloid β peptide, secondary structure of, neurotoxicity and (rat), 373
- Anesthetic, volatile, nicotinic acetylcholine receptor and, 1235
- Angiotensin receptor, size of, N-glycosylation and (rat), 1112
- Anti-inflammatory drugs, prostaglandin G/H synthase overexpression and (human), 245
- Antimalarial action, of hydrophilic drugs (human), 446
- Arachidonic acid
 cytochrome P450 2B4 bioactivation of (guinea pig), 1273
 release of, adenosine receptor and, in Chinese hamster ovary cell, 1036
- Aryl hydrocarbon receptor
 cytochrome P450 regulation of (mouse), 1153
 immunological analysis of (mouse), 428
- Aryl hydrocarbon receptor nuclear translocator protein, immunological analysis of (mouse), 428
- Ascorbic acid derivatives, lipophilic, NADPH-oxidase inhibition by, in neutrophils (human), 815

B

- Ba 679 BR, in lung (human), 899
- Benzodiazepine receptor
 α -aminobutyric acid receptor uncoupling from (mammal), 618
 in brain, flurazepam and (rat), 657
 peripheral type, reconstitution of (mouse), 201
- Bradykinin receptors, cloned, differential pharmacology of (human, mouse), 1
- Brain
 α -aminobutyric acid/benzodiazepine receptor in, flurazepam and (rat), 657
 γ -aminobutyric acid receptor subunits in (rat), 1061
 metabotropic glutamate receptor in
 in hamster, 570
 in rat, 626
- Breast tumor cell, DNA unwinding in, doxorubicin and, 649

C

- Calcium
 in 5-hydroxytryptamine receptor regulation of cAMP (rat), 826
 intracellular
 glutamate and (rat), 1050
 modulation of, in erythroleukemia cell (human), 1160

spiking frequency of, in pituitary gonadotroph (rat), 1013
 Calcium buffering, dideoxycytidine and, in dorsal root ganglion neurons (rat), 1119
 Calcium channel
 loperamide blockage of (rat and mouse), 747
 L-type, pituitary, membrane depolarization and (rat), 1198
 neuroleptic inhibition of (rat), 84
 in sarcoplasmic reticulum, hyperactive thiols on (rabbit and rat), 189
 Calcium current, insulin-like growth factor I and, in pituitary (human), 1215
 Calcium influx, voltage-dependent, α_1 B-adrenergic receptor and, in thyroid carcinoma cell (rat), 591
 Calmodulin, in 5-hydroxytryptamine receptor regulation of cAMP (rat), 826
 2 β -Carbomethoxy-3 β -(4-iodophenyl)tropane, active and inactive enantiomers of (baboon), 136
 Carcinogenesis, catecholestrogen and (hamster), 1259
 Cardiac muscarinic acetylcholine receptor, alcuronium and (rat), 709
 Cardiac myocyte response, endothelin receptor and (rat), 1183
 Catecholestrogen, carcinogenesis and (hamster), 1259
 Cation channel, nonselective, maitotoxin activation of (canine), 300
 Cervical carcinoma, cisplatin resistance in (human), 1137
 Chemotherapeutic drugs, pumping of, by multidrug resistance cell, kinetics of (mouse), 763
 2-Chloroadenine, DNA synthesis inhibited by (human), 955
 2-(3-Chlorophenyl)histamine, G protein activation by, in HL-60 cell, 578
 Cholecystokinin type A receptor, pancreatic (rat), 599
 Cinnarizine, flunarizine and (rat), 158
 Cisplatin, sensitivity and resistance to, metallothionein isoforms and (human), 453
 Cisplatin resistance, in cervical carcinoma (human), 1137
 Clara cell, naphthalene metabolism and cytotoxicity in (mouse), 664
 Colchicine-resistant neurites, staurosporine-induced, in PC12 cell (rat), 29
 Colon, signaling pathways in, docosahexaenoic acid and (rabbit), 737
 Colon carcinoma, diarylsulfonylurea antitumor agents for (human), 962
 Cortical neurons, *N*-methyl-D-aspartate receptor in (rat), 846
 c-src protein, tyrphostin and, in NIH/31082 cell (mouse), 922
 Cyclic adenosine monophosphate
 adenosine receptor and, in Chinese hamster ovary cell, 1036
 5-hydroxytryptamine receptor regulation of (rat), 826
 somatostatin receptor type 1 inhibition of (rat), 410
 Cyclophosphamide, toxicity of, aldose reductase and (human), 797
 CYP2C clones, cytochrome P450 in, sex-related differences in (hamster), 228
 Cysteine loop, of γ -aminobutyric acid receptor, mutational analysis of (*Xenopus*), 317
 L-Cysteine sulfinic acid, phospholipase D activity and (mammal), 1177
 Cytisine, agonist properties of, on neuronal nicotinic receptors, 142
 Cytochrome P450
 demethylation of epipodophyllotoxins by (human), 352
 methylenedioxymethamphetamine enantiomer demethylation by (rat), 359
 sex-related differences in (hamster), 228
 Cytochrome P450 2b4, epoxygenic acid formation and (guinea pig), 1198
 Cytochrome P4501A, dihydralazine interaction with (rat), 1287
 Cytoskeleton-disrupting drugs, cytochrome P450 *cyp1a-1* induction and (mouse), 944
 Cytotoxicity, and heat shock response to alcohol, in glioma cells (rat), 36

D

Deoxyribonucleic acid, complementary, for CYP2C clones, expression of, sex differences in (hamster), 228

Deoxyribonucleic acid synthesis, 2-chloroadenine inhibition of (human), 955
 Desferrioxamine, antimalarial action of (human), 446
 Dexamethasone, septal Trk autophosphorylation and (rat), 395
 Diamine, *N*-methyl-D-aspartate receptors and (rat), 117
 Diarylsulfonylurea antitumor agents, for colon carcinoma (human), 962
 Diclofenac, hepatocyte membrane protein and (rat), 237
 Dideoxycytidine, calcium buffering and, in dorsal root ganglion neurons (rat), 1119
 Dihydralazine, cytochrome P4501A interaction with (rat), 1287
 DNA, complementary
 for 5-hydroxytryptamine receptor clone, in kidney (opossum), 20
 for neurokinin A receptor, in urinary bladder (hamster), 9
 Docosahexaenoic acid, signaling pathways and, in colon (rabbit), 737
 Dopamine, release of, via dopamine transporter (human), 312
 Dopamine receptor
 heterologously expressed (hamster), 51
 regulation of, in Chinese hamster ovary cell, 878
 Dopamine receptor antagonists, calcium channel inhibition by (rat), 84
 Dopamine transporter
 cloned and native, heterogeneity of (human), 125
 dopamine release via (human), 312
 Dorsal root ganglion neuron, calcium buffering in, dideoxycytidine and (rat), 1119
 Doxorubicin
 DNA unwinding and, in MCF-7 breast tumor cell, 649
 topoisomerase II trapping by, multidrug resistance and (human), 908

E

Endothelial cell, ATP receptors on, desensitization of (bovine), 731
 Endothelin receptor
 in acute renal failure (rat), 182
 cardiac myocyte response and (rat), 1183
 RES-701-1 as antagonist to (bovine), 724
 subtypes of, in prostate (human), 306
 Epibatidine, nicotinic activity of (rat and guinea pig), 563
 Epidermal growth factor receptor, tyrphostin inhibition of (mouse), 673
 Epipodophyllotoxins, cytochrome P450 demethylation of (human), 352
 Epoxyeicosatrienoic acid formation, cytochrome P450 2B4 and (guinea pig), 1273
 Erythroleukemia cell, intracellular calcium modulation in (human), 1160
 Estradiol, carcinogenesis and (hamster), 1259
 Ethanol
 glucose transporter type 1 and (mammal), 1281
 nicotinic acetylcholine receptor open channel state stabilization by (*Torpedo*), 102
 N-methyl-D-aspartate receptor sensitivity to (*Xenopus*), 324
 serotonin and muscarinic G protein-linked receptors and (*Xenopus*), 1004

F

Fatty acid-binding protein, pioglitazone response element in (human), 439
 Flunarizine, parkinsonism and (rat), 158
 Flurazepam, and α -aminobutyric acid/benzodiazepine receptor expression in brain (rat), 657
 Folylpoly- γ -glutamate synthetase inhibitors, bay region, design of (mammals), 341
 Formyl peptide receptor, ternary complex of, spectroscopic analysis of (human), 65

G

Ganciclovir, phosphorylation of, modulation of (human), 777

G protein

- α_2 -adrenergic receptor activation of (rat), 524
- 2-(3-chlorophenyl)histamine activation of, in HL-60 cell, 578
- coupled adrenergic receptor
 - ligand structure and (human), 696
 - in phospholipid vesicles, 1071
- coupled receptor, muscarinic receptor functioning and (rat), 517
- coupling of somatostatin receptor to adenylyl cyclase by (hamster), 587
- dimeric receptor peptides and (human), 1191
- inhibitory, halothane inactivation of (human), 380
- muscarinic acetylcholine receptor coupling to, 890
- opioid receptor interaction with, 997
- somatostatin receptor type 1 coupling to (rat), 410
- GH₃ cell, somatostatin receptor subtypes in, adenylyl cyclase inhibition by (rat, human), 402
- Glucose transporter
 - type 1
 - cloning and characterization of (human and mouse), 608
 - ethanol and (mammal), 1281
- Glutamate
 - γ -aminobutyric acid receptor subunit induction by (rat), 637
 - intracellular sodium and calcium concentrations and (rat), 1050
- Glutamate antagonists, binding of, to *N*-methyl-D-aspartate receptor (*Xenopus*), 540
- Glutamate receptor, metabotropic
 - L-2-amino-4-phosphonobutyric acid activation of (rat), 367
 - in hamster brain, 570
 - phosphoprotein phosphatase and (rat), 1221
 - in rat brain, 626
- Glutathione *S*-transferase, oltipraz induction of (mouse), 469
- Glycine antagonists, binding of, to *N*-methyl-D-aspartate receptor (*Xenopus*), 540
- Gonadotropin-releasing hormone receptor, reciprocal mutation in (mouse), 165
- Granulocyte colony-stimulating factor receptor, histamine and (mouse), 837
- Guanine nucleotide-binding protein, K⁺ current activation by (bovine), 109

H

- Halothane, inhibitory G protein inactivation by (human), 380
- Heat shock response, to alcohol, cytotoxicity and, in glioma cells (rat), 36
- Hepatocyte membrane protein, diclofenac and (rat), 237
- Hepatoma cell, cytochrome P450 *cyp1a-1* induction in, nocodazole and (mouse), 944
- Herpes simplex virus thymidine kinase gene-transfected tumor cells, antihertic drug cytostatic activity against (rat), 1253
- Histamine, myeloblast and promyelocyte differentiation and (mouse), 837
- Histamine *N*-methyltransferase, cDNA of (human), 461
- Huperzine A, binding of, to acetylcholinesterase (human), 555
- Hydrophilic drugs, antimalarial action of (human), 446
- 15-Hydroxyeicosatetraenoic acid, prostaglandin G/H synthase over-expression and (human), 245
- 5-Hydroxytryptamine receptor
 - antagonist-mediated down-regulation of (rat), 1095
 - cAMP regulation by (rat), 826
 - in myometrial smooth muscle cell (rat), 1125
 - position 242 and (mammals), 277
- 5-Hydroxytryptamine receptor clone, in kidney (opossum), 20
- Hypothalamus, α_2 -adrenergic receptor binding in, estradiol and (rat), 509

I

- ¹²⁵I-4-aminobenzyl-5'-*N*-methylcarboxyamidoadenosine, as radioligand for adenosine receptor (rat), 978

- ¹²⁵I-azido-PAPA-APEC, adenosine receptor labeling by (dog), 871
- Immunosuppressant drugs, P-glycoprotein and (human), 773
- Inosine monophosphate dehydrogenase inhibitors, ganciclovir phosphorylation and (human), 777
- Inositol 1,2,4,5-tetrakisphosphate, actions of (rat), 271
- Insulin-like growth factor I, calcium current and, in pituitary (human), 1215

K

Kidney

- α_2 -adrenergic receptor clone in (opossum), 176
- cDNA of, cloning and expression of (human), 461
- embryonic
 - γ -aminobutyric acid receptor in, multiple α -subunits of (human), 475
 - somatostatin receptor subtypes in (rat, human), 402
- 5-hydroxytryptamine receptor clone in (opossum), 9
- maitotoxin activation of nonselective cation channel in (canine), 300
- Kupffer cells, lactosylated low density lipoprotein as carrier of lipophilic drugs to (rat), 971

L

- Leukotriene, biosynthesis of, protein kinase C and (human), 1043
- Leydig cell, reconstitution of peripheral type benzodiazepine receptor on (mouse), 201
- Lipophilic ascorbic acid derivatives, NADPH-oxidase inhibition by, in neutrophils (human), 815
- Lipoprotein
 - binding and signaling of, in vascular smooth muscle cells (human), 262
 - low density, lactosylated, as carrier of lipophilic drugs to Kupffer cells (rat), 971
- Liver, reactive oxygen intermediate generation by, with NADPH or NADH (liver), 150
- Loperamide
 - calcium channel blockage by (rat and mouse), 747
 - N*-methyl-D-aspartate-evoked responses and (rat and mouse), 747
- Lung, Ba 679 BR in (human), 899
- Lysophosphatidic acid receptor, identification and characterization of (rat), 718

M

- Madin-Darby canine kidney cell, maitotoxin activation of nonselective cation channel in (canine), 300
- Maitotoxin, nonselective cation channel activation by (canine), 300
- MCF-7 breast tumor cell, DNA unwinding in, doxorubicin and, 649
- Metallothionein isoform, drug resistance and (human), 453
- Methylenedioxymethamphetamine enantiomers, cytochrome P450 demethylation of (rat), 359
- Mianserin, 5-hydroxytryptamine receptor down-regulation by, 1095
- Mitochondrial toxicity, of diarylsulfonylurea antitumor agents (human), 962
- Multidrug resistance
 - doxorubicin structural modifications and (human), 908
 - rhodamine binding to P-glycoprotein in (human), 1145
- Multidrug resistance cell, drug pumping by, kinetics of (mouse), 763
- Muramyl tripeptide-phosphatidylethanolamine, lactosylated low density lipoprotein as carrier of, to Kupffer cells (rat), 971
- Muscarinic acetylcholine receptor
 - cardiac, alcuronium and (rat), 709
 - G protein-coupled (human), 890
 - G protein-coupled, protein kinase C and (*Xenopus*), 1004
 - intramolecular interactions in (human), 61
- Muscarinic antagonist, in lung (human), 899
- Muscarinic neurotransmitter receptor, mutagenesis of (rat), 517
- Myeloblast, differentiation of, histamine and (mouse), 837

Myocardium, adenylate cyclase in, halothane sensitization of (human), 380
 Myometrial smooth muscle cells, 5-hydroxytryptamine receptor in (rat), 1125

N

NADPH-oxidase inhibition, in neutrophils, by ascorbic acid derivatives (human), 815
 Naphthalene, metabolism and cytotoxicity of, in Clara cell (mouse), 664
 Neocarzinostatin protein, biological activity of, 1268
 Nerve growth factor, dexamethasone-mediated septal Trk autophosphorylation and (rat), 395
 Neurokinin A receptor, in urinary bladder, isolation and characterization of (hamster), 9
 Neurokinin-1 receptor
 ligand binding site of (human), 690
 nonpeptide antagonists at (rat), 500
 Neuroleptic, calcium channel inhibition by (rat), 84
 Neuronal cell, 5-hydroxytryptamine receptors in, cAMP accumulation and (rat), 826
 Neuronal nicotinic receptors, cytosine agonist properties on, 142
 Neuropeptide Y, structure-activity studies of (rat), 93
 Neurotoxicity, amyloid β peptide secondary structure and (rat), 373
 Neurotransmitter, muscarinic receptor for, mutagenesis of (rat), 517
 Neutrophil, polymorphonuclear, NADPH-oxidase inhibition in, by ascorbic acid derivatives (human), 815
 NG108-15 cell, ATP-induced signal transduction in, 532
 N-glycosylation, angiotensin receptor size and (rat), 1112
 Nicotinic acetylcholine receptor
 alcohol and volatile anesthetics and, 1235
 open channel state of, ethanol stabilization of (*Torpedo*), 102
 substance P binding to (*Torpedo*), 221
 substance P inhibition of (*Xenopus*), 758
 Nicotinic activity, of epibatidine (rat and guinea pig), 563
 Nicotinic receptor, α_7 and α_8 homomers of (chicken), 212
 NK-1 receptor, septide activation of (mammals), 287
 NK-1 receptor antagonists, species selectivity of (rat and human), 294
 N-methyl-D-aspartate
 effect of, on glutamate induction of α -aminobutyric acid subunits (rat), 637
 -evoked responses, loperamide and (rat and mouse), 747
 N-methyl-D-aspartate receptor
 cloned, pharmacology of (*Xenopus*), 540
 in cortical neurons (rat), 846
 diamine and (rat), 117
 ethanol sensitivity of (*Xenopus*), 324
 polyamine sensitivity of (*Xenopus*), 803
 N-methyltransferase, in histamine, cDNA of (human), 461
 Nocodazole, cytochrome P450 *cyp1a-1* induction and (mouse), 944
 Norepinephrine, release of, α_2 -adrenergic receptor and (human), 1168

O

Oligonucleotide, 3 H-labeled, biodistribution and metabolism of, 932
 Oltipraz, glutathione S-transferase induction by (mouse), 469
 Opioid receptor
 cloned, pharmacology of (mammals), 330
 G protein interaction with, 997
 Oxygen, reactive intermediates of, liver generation of, with NADPH or NADH (liver), 150

P

Palytoxin, sodium pump interaction with, in yeast, 1132
 Pancreas, cholecystikinin type A receptor in (rat), 599
 Parasites, intracellular, hydrophilic drug action on (human), 446
 Parkinsonism, flunarizine and cinnarizine and (rat), 158

PC12 cell, staurosporine-induced colchicine-resistant neurites in (rat), 29
 P-glycoprotein
 immunosuppressant drugs and (human), 773
 rhodamine binding to, in multidrug resistance (human), 1145
 Phenobarbital, recombinant UDP-glucuronosyltransferase 2B1 inducible by, specificity of (hamster), 42
 Phloridzin, antimalarial action of (human), 446
 Phospholipase C, release of, adenosine receptor and, in Chinese hamster ovary cell, 1036
 Phospholipase D activity, L-cysteine sulfinic acid and (mammal), 1177
 Phospholipid vesicle, adrenergic receptor coupling to G protein in, 1071
 Phosphoprotein phosphatase, metabotropic glutamate receptor and (rat), 1221
 Pioglitazone response element, in adipocyte fatty acid-binding protein gene (human), 439
 Pituitary cell
 calcium channels in, membrane depolarization and (rat), 1198
 calcium currents in, insulin-like growth factor I and (human), 1215
 somatostatin receptor subtypes in, adenylyl cyclase inhibition by (rat, human), 402
 Pituitary gonadotroph, calcium spiking frequency in (rat), 1013
 Polyamine, N-methyl-D-aspartate receptor sensitivity to (*Xenopus*), 803
 Polycyclic aromatic hydrocarbon metabolism, cytochrome P450 expression and (mouse), 1153
 Potassium channel
 aminopyridine block of (mammal and *Xenopus*), 1242
 pharmacological characterization of (mammal), 1227
 Potassium channel ROMK1 mRNA, alternative splicing of (human), 854
 Potassium current, G protein-activated (bovine), 109
 Promyelocyte, differentiation of, histamine and (mouse), 837
 Prostacyclin receptor, intracellular calcium and, in erythroleukemia cell (human), 1160
 Prostaglandin E receptor, intracellular calcium and, in erythroleukemia cell (human), 1160
 Prostaglandin G/H synthase, overexpression of, anti-inflammatories and 15-hydroxyeicosatetraenoic acid and (human), 245
 Prostate
 endothelin receptor subtypes in (human), 306
 smooth muscle contraction in, α_1 -adrenergic receptor and (human), 703
 Protein kinase C
 G protein-coupled 5-hydroxytryptamine receptor and (*Xenopus*), 1004
 in 5-hydroxytryptamine receptor regulation of cAMP (rat), 826
 leukotriene biosynthesis and (human), 1043
 UCN-01 and (*Xenopus*), 1207
 P110123, biochemical studies of (rat), 783

R

Renal failure, acute, endothelin receptor in (rat), 182
 RES-701-1, as endothelin receptor antagonist (bovine), 724
 Rhodamine, binding of, to P-glycoprotein, in multidrug resistance (human), 1145
 Ribonucleic acid, messenger, α_1 -adrenergic receptor subtypes in (human), 171
 Ribonucleotide reductase, *p*-alkoxyphenol inhibition of (mouse and *Escherichia coli*), 792
 Ryanodine receptor-triadin complex, in sarcoplasmic reticulum, hyperactive sulfhydryls on (rabbit and rat), 189

S

Sarcoplasmic reticulum, calcium channel complex in, hyperactive thiols on (rabbit and rat), 189
 Secretin receptor, coupling of, to adenylate cyclase, in Chinese hamster ovary cell, 1022

- Septal Trk autophosphorylation, dexamethasone-mediated (rat), 395
 Septide, NK-1 receptor activation by (mammal), 287
 Serotonin, 5-hydroxytryptamine receptor down-regulation by, 1095
 S49 lymphoma, adenylate cyclase in, halothane sensitization of (human), 380
 Smooth muscle cells, myometrial, 5-hydroxytryptamine receptor in (rat), 1125
 Smooth muscle contraction, in prostate, α_1 -adrenergic receptor and (human), 703
 Sodium, intracellular, glutamate and (rat), 1050
 Sodium pump, palytoxin and, in yeast, 1132
 Somatostatin receptor
 cloning and expression of (human), 417
 G protein coupling by and cAMP inhibition by (rat), 410
 G protein coupling of, to adenylyl cyclase (hamster), 587
 pituitary, adenylyl cyclase inhibition by (rat, human), 402
 Spermine, *N*-methyl-D-aspartate receptor sensitivity and (*Xenopus*), 803
 Staurosporine, colchicine-resistant neurites induced by (rat), 29
 Staurosporine analog, protein kinase C and (*Xenopus*), 1207
 Substance P
 nicotinic acetylcholine receptor binding by (*Torpedo*), 221
 nicotinic acetylcholine receptor inhibition by (*Xenopus*), 758
 Substance P receptor, nonpeptide antagonists at (rat), 500
 Sulfhydryls, hyperactive, on calcium channels in sarcoplasmic reticulum (rabbit and rat), 189
- T**
- Tau* protein, staurosporine-induced neurite expression of, in PC12 cell (rat), 29
- Ternary complex, of formyl peptide receptor, spectroscopic analysis of (human), 65
 Thiols, hyperactive, on sarcoplasmic reticulum calcium channel complex (rabbit and rat), 189
 Thyroid carcinoma cell, α_1 B-adrenergic receptor and voltage-dependent calcium influx in (rat), 591
 Thyrotropin-releasing hormone receptor, cell-specific desensitization of (mammal), 684
 Topoisomerase II, doxorubicin trapping of, multidrug resistance and (human), 908
 Trk autophosphorylation, septal, dexamethasone-mediated (rat), 395
 Tyrphostin
 c-src protein and, in NIH/31082 cell, 922
 epidermal growth factor receptor activity and (mouse), 673
- U**
- UCN-01, protein kinase C and (*Xenopus*), 1207
 UDP-glucuronosyltransferase 2B1, recombinant, phenobarbital-inducible, specificity of (hamster), 42
 Urinary bladder, neurokinin A receptor in, isolation and characterization of (hamster), 9
- V**
- Vascular smooth muscle cells, lipoprotein binding and signaling in (human), 262

AUTHOR INDEX FOR VOLUME 45

A

- Abdel-Hamid, K., *see* Church, J., 747
 Abramovitz, M., *see* O'Neill, G. P., 245
 Abramson, J. J., *see* Liu, G., 189
 Agbaria, R., Mullen, C. A., Hartman, N. R., Cooney, D. A., Hao, Z., Blaese, R. M., and Johns, D. G. Effects of IMP dehydrogenase inhibitors on the phosphorylation of ganciclovir in MOLT-4 cells before and after herpes simplex virus thymidine kinase gene transduction, 777
 Agbotounou, W. K., Levitzki, A., Jacquemin-Sablon, A., and Pierre, J. Effects of tyrphostins on the activated c-src protein in NIH/31082 cells, 922
 Aharony, D., Little, J., Thomas, C., Powell, S., Berry, D. and Graham, A. Isolation and pharmacological characterization of a hamster urinary bladder neurokinin A receptor cDNA, 9
 Ahern, D., *see* Thomson, F. J., 718
 Aiyar, J., *see* Grissmer, S., 1227
 Akbar, M., Okajima, F., Tomura, H., Shimegi, S., and Kondo, Y. A single species of A₁ adenosine receptor expressed in Chinese hamster ovary cells not only inhibits cAMP accumulation but also stimulates phospholipase C and arachidonate release, 1036
 Ali, A., *see* Kargman, S., 1043
 Al-Tikriti, M. S., *see* Scanley, B. E., 136
 Alvira, M., *see* Falck-Pedersen, E., 684
 Amin, J., Dickerson, I. M., and Weiss, D. S. The agonist binding site of the γ -aminobutyric acid type A channel is not formed by the extracellular cysteine loop, 317
 Anand, R., *see* Gerzanich, V., 212
 Anand, R., *see* Peng, X., 546
 Anegawa, N. J., *see* Lynch, D. R., 540
 Anselment, A., *see* Eichler, J., 335
 Ashani, Y., Grunwald, J., Kronman, C., Velan, B., and Shafferman, A. Role of tyrosine 337 in binding of Huperzine A to the active site of human acetylcholinesterase, 555
 Auperin, D. D., *see* Grissmer, S., 1227

B

- Badio, B., and Daly, J. W. Epibatidine, a potent analgetic and nicotinic agonist, 563
 Baez, M., *see* Johnson, M. P., 277
 Bahnson, R. R., *see* Yang, Y.-Y., 453
 Baldwin, R. M., *see* Scanley, B. E., 136
 Balestrieri, M. L., *see* Calderaro, V., 737
 Ballesteros, J. A., *see* Zhou, W., 165
 Balzarini, J., Bohman, C., Walker, R. T., and de Clercq, E. Comparative cytostatic activity of different antiherpetic drugs against herpes simplex virus thymidine kinase gene-transfected tumor cells, 1253
 Bangalore, R., *see* Liu, J., 1198
 Barber, R., *see* Whaley, B. S., 481
 Bard, J. A., *see* Forray, C., 703
 Barnes, P. J., *see* Haddad, E.-B., 899
 Baron, P., *see* Prochaska, H. J., 916
 Bean, B. P., *see* Sah, D. W. Y., 84
 Beaune, P. H., *see* Bourdi, M., 1287
 Becker, G. W., *see* Simmons, L. K., 373
 Bell, G. I., *see* Law S. F., 587
 Bell, G. I., *see* Raynor, K., 330
 Bell, G. I., *see* Yano, H., 854

- Bend, J. R., *see* Knickle, L. C., 1273
 Berg, K. A., Clarke, W. P., Chen, Y., Ebersole, B. J., McKay, R. D. G., and Maayani, S. 5-hydroxytryptamine type 2A receptors regulate cyclic AMP accumulation in a neuronal cell line by protein kinase C-dependent and calcium/calmodulin-dependent mechanisms, 826
 Berkowitz, D., *see* Price, D. T., 171
 Berry, D., *see* Aharony, D., 9
 Biaggioni, I., *see* Feoktistov, I., 1160
 Binaschi, M., *see* Capranico, G., 908
 Birnbaumer, L., *see* Whaley, B. S., 481
 Bischer, P., *see* Schöller, A., 944
 Blaese, R. M., *see* Agbaria, R., 777
 Blair, L. A. C., *see* Selinfreund, R. H., 1215
 Blaxall, H. S., Cerutis, D. R., Hass, N. A., Iversen, L. J., and Bylund, D. B. Cloning and expression of the α_{2C} -adrenergic receptor from the OK cell line, 176
 Blumberg, P. M., *see* Seynaeve, C. M., 1207
 Boarder, M. R., *see* Wilkinson, G. F., 731
 Bochkov, V. N., Tkachuk, V. A., Kuzmenko, Y. S., Borisova, Y. L., Bühler, F. R., and Resink, T. J. Characteristics of low and high density lipoprotein binding and lipoprotein-induced signaling in quiescent human vascular smooth muscle cells, 2, 62
 Bock, M.-D., *see* Pradier, L., 287
 Bockaert, J., *see* Prézeau, L., 570
 Boelsterli, U. A., *see* Kretz-Rommel, A., 237
 Böhm, M., Schmidt, U., Gierschik, P., Schwinger, R. H. G., Böhm, S., and Erdmann, E. Sensitization of adenylate cyclase by halothane in human myocardium and S49 lymphoma wild-type and cyc-cells: Evidence for inactivation of the inhibitory G protein G_i, 380
 Böhm, S., *see* Böhm, M., 380
 Bohman, C., *see* Balzarini, J., 1253
 Bollen, A., *see* Vilardaga, J. P., 1022
 Bombien, E., *see* Offermanns, S., 890
 Borisova, Y. L., *see* Bochkov, V. N., 262
 Borkowski, J. A., *see* Hess, J. F., 1
 Boss, V., Nutt, K. M., and Conn, P. J. L-Cysteine sulfinic acid as an endogenous agonist of a novel metabotropic receptor coupled to stimulation of phospholipase D activity, 1177
 Bouisson, M., *see* Poirrot, S. S., 599
 Boujrad, N., *see* Garnier, M., 201
 Bourdi, M., Tinel, M., Beaune, P. H., and Pessayre, D. Interactions of dihydralazine with cytochromes P4501A: A possible explanation for the appearance of anti-cytochrome P4501A2 autoantibodies, 1287
 Bouvier, M., *see* Chidiac, P., 490
 Brancheck, T. A., *see* Forray, C., 703
 Braquet, P., *see* Roubert, P., 182
 Brauneis, U., *see* Masood, K., 324
 Brelière, J.-C., *see* Gether, U., 500
 Brems, D. N., *see* Simmons, L. K., 373
 Brigham, E. F., *see* Simmons, L. K., 373
 Brown, E. R., *see* Saporito, M. S., 395
 Brown, M., *see* McIntyre, P., 561
 Brunton, L. L., *see* Hilal-Dandan, R., 1183
 Buckpitt, A. R., *see* Chichester, C. H., 664
 Bühler, F. R., *see* Bochkov, V. N., 262
 Bürki, E., *see* Widmann, C., 1029
 Bylund, D. B., *see* Blaxall, H. S., 176
 Bylund, D. B., *see* Cerutis, D. R.:20

C

- Cabantchik, Z. I., *see* Loyevsky, M., 446
 Cadieux, A., *see* Fournier, A., 93
 Calderaro, V., Parrillo, C., Balestrieri, M. L., Giovane, A., Filippelli, A., and Rossi, F. Docosahexaenoic acid and signaling pathways in rabbit colon, 737
 Calvert, A. H., *see* Sanghani, P. C., 341
 Cannon, S. D., Wilson, S. P. and Walsh, K. B. A G protein-activated K⁺ current in bovine adrenal chromaffin cells: Possible regulatory role in exocytosis, 109
 Capolongo, L., *see* Capranico, G., 908
 Capranico, G. Supino R., Binaschi, M., Capolongo, L., Grandi, M., Suarato, A., and Zunino, F. Influence of structural modifications at the 3' and 4' positions of doxorubicin on the drug ability to trap topoisomerase II and to overcome multidrug resistance, 908
 Cardarelli, C., *see* Stein, W. D., 763
 Caron, M. G., *see* Kim, K.-M., 608
 Caron, M. G., *see* Price, D. T., 171
 Carrette, J., *see* Prézeau, L., 570
 Carswell, S., *see* Saporito, M. S., 395
 Castle, N. A., Fadous, S., Logothetis, D. E., and Wang, G. K. Amino-pyridine block of Kv1.1 potassium channels expressed in mammalian cells and *Xenopus* oocytes, 1242
 Catania, M. V., de Socarraz, H., Penney, J. B., and Young, A. B. Metabotropic glutamate receptor heterogeneity in rat brain, 626.
 Catt, K. J., *see* Stojilkovic, S. S., 1013
 Cederbaum, A. I., *see* Rashba-Step, J., 150
 Cerutis, D. R., Hass, N. A., Iversen, L. J., and Bylund, D. B. The cloning and expression of an OK cell cDNA encoding a 5-hydroxytryptamine_{1B} receptor, 20
 Cerutis, D. R., *see* Blaxall, H. S., 176
 Chabrier, P. E., *see* Roubert, P., 182
 Chandy, K. G., *see* Grissmer, S., 1227
 Chang, A., *see* Chichester, C. H., 664
 Chao, C. C.-K. Decreased accumulation as a mechanism of resistance to *cis*-diaminedichloroplatinum(II) in cervix carcinoma HeLa cells: Relation to DNA repair, 1137
 Charlton, M. E., *see* Harris, B. T., 637
 Charney, D. S., *see* Scanley, B. E., 136
 Chen, Y., *see* Berg, K. A., 826
 Chen, Y., *see* Raynor, K., 330
 Chichester, C. H., Buckpitt, A. R., Chang, A., and Plopper, C. G. Metabolism and cytotoxicity of naphthalene and its metabolites in isolated murine Clara cells, 664
 Chidester, D., *see* Sands, H., 932
 Chidiac, P., Hebert, T. E., Valiquette, M., Dennis, M., and Bouvier, M. Inverse agonist activity of β -adrenergic antagonists, 490
 Chio, C. L., Lajiness, M. E., and Huff, R. M. Activation of heterologously expressed D3 dopamine receptors: Comparison to D2 dopamine receptors, 51
 Chiu, G., *see* Forray, C., 703
 Chiu, T. H., *see* Zhao, T.-J., 657
 Cho, A. K., *see* Kamagia, Y., 359
 Christ, M., *see* Scheiner-Bobis, G., 1132
 Chueh, S.-H., Hsu, L.-S., and Song, S.-L. Two distinct ATP signaling mechanisms in differentiated neuroblastoma X glioma hybrid NG108-15 cells, 532
 Church, J., Fletcher, E. J., Abdel-Hamid, K., and MacDonald, J. F. Loperamide blocks high-voltage-activated calcium channels and N-methyl-D-aspartate-evoked responses in rat and mouse cultured hippocampal pyramidal neurons, 747
 Ciccarelli, E., *see* Vilardaga, J. P., 1022
 Clapper, M. L., Everley, L. C., Strobel, L. S., Townsend, A. J. and Engstrom, P. F. Coordinate induction of glutathione S-transferase α , μ , and π expression in murine liver after a single administration of oltipraz, 469
 Clark, M., *see* Thomson, F. J., 718

- Clark, R. B., *see* Whaley, B. S., 481
 Clarke, W. P., *see* Berg, K. A., 826
 Cocuzza, A. J., *see* Sands, H., 932
 Conn, P. J., *see* Boss, V., 1177
 Cooney, D. A., *see* Agbaria, R., 777
 Cornet, S., *see* Roubert, P., 182
 Costa, E., *see* Harris, B. T., 637
 Costa, E., *see* Kiedrowski, L., 1050
 Costa, T., *see* Samama, P., 390
 Cotecchia, S., *see* Samama, P., 390
 Cromlish, W., *see* O'Neill, G. P., 245
 Culp, S., *see* O'Neill, G. P., 245
 Curry, K., *see* Prézeau, L., 570

D

- Dalman, H. M., *see* Wade, S. M., 1191
 Daly, J. W., *see* Badio, B., 563
 Davidson, J. S., *see* Zhou, W., 165
 Davis, E. M., *see* Yano, H., 854
 Day, R., *see* Panetta, R., 417
 de Clercq, E., *see* Balzarini, J., 1253
 Demchyshyn, L. L., *see* Panetta, R., 417
 de Neef, P., *see* Vilardaga, J. P., 1022
 Dennis, M., *see* Chidiac, P., 490
 de Socarraz, H., *see* Catania, M. V., 626
 Deth, R. C., *see* Tian, W.-N., 524
 Diamond, I., *see* Krauss, S. W., 1281
 Dias, P., *see* Sosinski, J. F., 962
 Dickerson, I. M., *see* Amin, J., 317
 Dietl, P., and Völkl, H. Maitotoxin activates a nonselective cation channel and stimulates Ca²⁺ entry in MDCK renal epithelial cells, 300
 Dildy-Mayfield, J. E., *see* Sanna, E., 1004
 Dilger, J. P., *see* Liu, Y., 1235
 Dimchev, A. B., *see* Garnier, M., 201
 Doble, A., *see* Pradier, L., 287
 Doi, M., *see* Tasaka, K., 837
 Dolci, W., *see* Widmann, C., 1029
 Domalewski, M. D., *see* Posner, R. G., 65
 Donevan, S. D., *see* Subramaniam, S., 117
 Drapeau, P., *see* Hebert, T., 1055
 Drechsler, H., *see* Pötsch, S., 792
 Du, Y.-L., Wilcox, B. D., Teitler, M., and Jeffrey, J. J. Isolation and characterization of the rat 5-hydroxytryptamine type 2 receptor promoter: Constitutive and inducible activity in myometrial smooth muscle cells, 1125
 Dubeaux, C., *see* Vilardaga, J. P., 1022
 Dudley, D. T., *see* Servant, G., 1112
 Dufresne, M., *see* Poirot, S. S., 599
 Dumont, Y., *see* Fournier, A., 93
 Dunn, R. J., *see* Hebert, T., 1055
 Duzic, E., *see* Tian, W.-N., 524

E

- Eason, M. G., Jacinto, M. T., and Liggett, S. B. Contribution of ligand structure to activation of α_2 -adrenergic receptor subtype coupling to G_s, 696
 Ebersole, B. J., *see* Berg, K. A., 826
 Eck, M., *see* Leppik, R. A., 983
 Edmonds-Alt, X., *see* Gether, U., 500
 Eichler, J., Anselmet, A., Sussman, J. L., Massoulié, J., and Silman, I. Differential effects of the "peripheral" site ligands on *torpedo* and chicken acetylcholinesterase, 335
 El-Fakahany, E. E., *see* Zhu, S. Z., 517
 Engel, M., *see* Posner, R. G., 673
 Engstrom, P. F., *see* Clapper, M. L., 469
 Eppler, C. M., *see* Hadcock, J. R., 410

- Erdmann, E., *see* Böhm, M., 380
 Esbenshade, T. A., Theroux, T. L., and Minneman, K. P. Increased voltage-dependent calcium influx produced by α_{1B} -adrenergic receptor activation in rat medullary thyroid carcinoma 6-23 cells, 591
 Escher, E., *see* Servant, G., 1112
 Escrieut, C., *see* Poirot, S. S., 599
 Eshleman, A. J., Henningsen, R. A., Neve, K. A., and Janowsky, A., Release of dopamine via the human transporter, 312
 Etgen, A. M., *see* Karkanas, G. B., 509
 Evans, J. F., *see* Kargman, S., 1043
 Evans, J. F., *see* O'Neill, G. P., 245
 Evans, V. R., *see* Sanghani, P. C., 341
 Everley, L. C., *see* Clapper, M. L., 469

F

- Fadous, S., *see* Castle, N. A., 1242
 Falck-Pedersen, E., Heinfink, M., Alvira, M., Nussenzweig, D. R., and Gershengorn, M. C. Expression of thyrotropin-releasing hormone receptors by adenovirus-mediated gene transfer reveals that thyrotropin-releasing hormone desensitization is cell specific, 684
 Falgoutyret, J.-P., *see* O'Neill, G. P., 245
 Fardin, V., *see* Pradier, L., 287
 Fay, S. P., *see* Posner, R. G., 65
 Feoktistov, I., Murray, J. J., and Biaggioni, I. Positive modulation of intracellular Ca^{2+} levels by adenosine A_{2B} , prostacyclin, and prostaglandin E_1 receptors via a cholera toxin-sensitive mechanism in human erythroleukemia cells, 1160
 Figala, V., *see* Schmid, E., 815
 Filippelli, A., *see* Calderaro, V., 737
 Flanagan, C., *see* Zhou, W., 165
 Fletcher, E. J., *see* Church, J., 747
 Fong, T. M., *see* Huang, R.-R. C., 690
 Ford-Hutchinson, A. W., *see* O'Neill, G. P., 245
 Fornari, F. A., Randolph, J. K., Yalowich, J. C., Ritke, M. K., and Gewirtz, D. A. Interference by doxorubicin with DNA unwinding in MCF-7 breast tumor cells, 649
 Forray, C., Bard, J. A., Wetzel, J. M., Chiu, G., Shapiro, E., Tang, R., Lepor, H., Hartig, P. R., Weinshank, R. L., Branchek, T. A., and Gluchowski, C. The α_1 -adrenergic receptor that mediates smooth muscle contraction in human prostate has the pharmacological properties of the cloned human α_{1C} subtype, 703
 Fourmy, D., *see* Poirot, S. S., 599
 Fournel-Gigleux, S., *see* Pritchard, M., 42
 Fournier, A., Gagnon, D., Quirion, R., Cadieux, A., Dumont, Y., Pheng, L.-H., and St-Pierre, S. Conformational and biological studies of neuropeptide Y analogs containing structural alterations, 93
 Fracella, F., *see* Neuhaus-Steinmetz, U., 36
 Fraher, J., *see* Hess, J. F., 1
 Fujii, T., *see* Gether, U., 500
 Fuson, K. S., *see* Simmons, L. K., 373

G

- Gagnon, D., *see* Fournier, A., 93
 Galivan, J., *see* Rhee, M. S., 783
 Gallo-Rodriguez, C., *see* Olah, M. E., 978
 Gallo-Rodriguez, C., *see* van Galen, P. J. M., 1101
 Gao, Y., *see* Scanley, B. E., 136
 Garcia, P. D., and Myers, R. M. Pituitary cell line GH₃ expresses two somatostatin receptor subtypes that inhibit adenylyl cyclase: Functional expression of rat somatostatin receptor subtypes 1 and 2 in human embryonic kidney 293 cells, 402
 Garnier, M., Dimchev, A. B., Boujrad, N., Price, J. M., Musto, N. A., and Papadopoulos, V. *In Vitro* reconstitution of a functional peripheral-type benzodiazepine receptor from mouse Leydig tumor cells, 201
 Garret, C., *see* Pradier, L., 287

- Gazit, A., *see* Posner, I., 673
 Georges, E., *see* Nare, B., 1145
 Gerard, N. P., *see* Jensen, C. J., 294
 Germain, G. S., *see* Sosinski, J. F., 962
 Gershengorn, M. C., *see* Falck-Pedersen, 684
 Gerzanich, V., Anand, R., and Linstrom, J. Homomers of $\alpha 8$ and $\alpha 7$ subunits of nicotinic receptors exhibit similar channel but contrasting binding site properties, 212
 Gerzanich, V., *see* Peng, X., 546
 Gether, U., Edmonds-Alt, X., Brelière, J.-C., Fujii, T., Hagiwara, D., Pradier, L., Garret, C., Johansen, T. E., and Schwartz, T. W. Evidence for a common molecular mode of action for chemically distinct nonpeptide antagonists at the neurokinin-1 (substance P) receptor, 500
 Gether, U., *see* Jensen, C. J., 294
 Gettys, T. W., *see* Palmer, T. M., 1082
 Gewirtz, D. A., *see* Fornari, F. A., 649
 Giddings, S. S., *see* Scanley, B. E., 136
 Gierschik, P., *see* Böhm, M., 380
 Gilchrist, T. L., *see* Stalford, A. C., 1259
 Gillard, N. P., *see* Quirk, K., 1061
 Gillard-Roubert, V., *see* Roubert, P., 182
 Ginzburg, I., *see* Rasouly, D., 29
 Giovane, A., *see* Calderaro, V., 737
 Girard, B., Otterness, D. M., Wood, T. C., Honchel, R., Wieben, E. D., and Weinshilboum, R. M. Human histamine *N*-methyltransferase pharmacogenetics: Cloning and expression of kidney cDNA, 461
 Giros, B., *see* Kim, K.-M., 608
 Glaum, S. R., and Miller, R. J. Inhibition of phosphoprotein phosphatases blocks metabotropic glutamate receptor effects in the rat nucleus tractus solitarius, 1221
 Gluchowski, C., *see* Forray, C., 703
 Godinot, N., *see* Kim, K.-M., 608
 Gonzalez, F. J., *see* Relling, M. V., 352
 Gordon, A. D., *see* Krauss, S. W., 1281
 Gorey-Feret, L. J., *see* Sands, H., 932
 Gottesman, M. M., *see* Stein, W. D., 763
 Graham, A., *see* Aharony, D., 9
 Grandi, M., *see* Capranico, G., 908
 Gräslund, A., *see* Pötsch, S., 792
 Grayson, D. R., *see* Harris, B. T., 637
 Greenwood, M. T., *see* Panetta, R., 417
 Grippo, P., *see* Hentosh, P., 955
 Grissmer, S., Nguyen, A. N., Aiyar, J., Hanson, D. C., Mather, R. J., Gutman, G. A., Karmilowicz, M. J., Auperin, D. D., and Chandy, K. G. Pharmacological characterization of five cloned voltage-gated K^+ channels, types 1.1, 1.2, 1.3, 1.5, and 3.1, stably expressed in mammalian cell lines, 1227
 Grünbaum, L., *see* Seifert, R., 578
 Grunwald, J., *see* Ashani, J., 555
 Guillemette, G., *see* Servant, G., 1112
 Guilmard, C., *see* Roubert, P., 182
 Gutman, G. A., *see* Grissmer, S., 1227

H

- Habermann, E., *see* Scheiner-Bobis, G., 1132
 Hadcock, J. R., Strnad, J., and Eppler, C. M. Rat somatostatin receptor type I couples to G proteins and inhibition of the cyclic AMP accumulation, 410
 Haddad, E.-B., Mak, J. C. W., and Barnes, P. J. Characterization of [3H]Ba 679 BR, a slowly dissociating muscarinic antagonist, in human lung: Radioligand binding and autoradiographic mapping, 899
 Hagelüken, A., *see* Seifert, R., 578
 Hagiwara, D., *see* Gether, U., 500
 Han, H., *see* Kim, K.-M., 608
 Hanson, D. C., *see* Grissmer, S., 1227

- Hao, Z., *see* Agbaria, R., 777
- Harris, B. T., Charlton, M. E., Costa, E., and Grayson, D. R. Quantitative changes in $\alpha 1$ and $\alpha 5$ γ -aminobutyric acid type A receptor subunit mRNAs and proteins after a single treatment of cerebellar granule neurons with *N*-methyl-D-aspartate, 637
- Harris, P. K. W., and Kletzien, R. F. Localization of a pioglitazone response element in the adipocyte fatty acid-binding protein gene, 439
- Harris, R. A., *see* Sanna, E., 1004
- Hartig, P. R., *see* Forray, C., 703
- Hartman, N. R., *see* Agbaria, R., 777
- Hartpence, K. C., *see* Saporito, M. S., 395
- Harwood, F. C., *see* Sosinski, J. F., 962
- Hass, N. A., *see* Blaxall, H. S., 176
- Hass, N. A. *see* Cerutis, D. R., 20
- Hebert, T., Drapeau, P., Pradier, L., and Dunn, R. J. Block of the rat brain IIA sodium channel α subunit by the neuroprotective drug riluzole, 1055
- Hebert, T. E., *see* Chidiac, P., 490
- Heinemann, S. F., *see* Papke, R. L., 142
- Heinflink, M., *see* Falck-Pedersen, E., 684
- Helpap, B., *see* Prézeau, L., 570
- Henningsen, R. A., *see* Eshleman, A. J., 312
- Hentosh, P., and Grippo, P. Template 2-chloro-2'-deoxyadenosine monophosphate inhibits *in vitro* DNA synthesis, 955
- Hess, J. F., Borkowski, J. A., MacNeil, T., Stonesifer, G. Y., Fraher, J., Strader, C. D., and Ransom, R. W. Differential pharmacology of the cloned human and mouse B₂ bradykinin receptors, 1
- Heuillet, E., *see* Pradier, L., 287
- Hilal-Dandan, R., Merck, D., Lujan, J., and Brunton, L. L. Coupling of the type A endothelin receptor to multiple responses in adult rat cardiac myocytes, 1183
- Himel, C. M., *see* Taylor, J. L., 74
- Hirata, M., Narumoto, N., Watanabe, Y., Kanematsu, T., Koga, T., and Ozaki, S. DL-*myo*-inositol 1,2,4,5-tetrakisphosphate, a potent analog of D-*myo*-inositol 1,4,5-trisphosphate, 271
- Hiratsuka, A., *see* Kumagai, Y., 359
- Hobbs, F. W., *see* Sands, H., 932
- Höer, A., *see* Seifert, R., 578
- Höer, D., *see* Seifert, R., 578
- Hoffer, P. B., *see* Scanley, B. E., 136
- Hoffman, B. J., *see* Pristupa, Z. B., 125
- Homann, D., *see* Offermanns, S., 890
- Honchel, R., *see* Girard, B., 461
- Hong, N. J., *see* Schöller, A., 944
- Houghton, P. J., *see* Sosinski, J. F., 962
- Hsu, L.-S., *see* Chueh, S.-H., 532
- Hu, J., *see* Zhu, S. Z., 517
- Hu, X.-J., and Ticku, M. K. Chronic benzodiazepine agonist treatment produces functional uncoupling of the γ -aminobutyric acid-benzodiazepine receptor ionophore complex in cortical neurons, 618
- Huang, R.-R. C., Yu, H., Strader, C. D., and Fong, T. M. Localization of the ligand binding site of the neurokinin-1 receptor: Interpretation of chimeric mutations and single-residue substitutions, 690
- Hue, L., *see* Veitch, K., 158
- Huff, R. M., *see* Chio, C. L., 51
- Hughes, L., *see* Sanghani, P. C., 341
- Hunsaker, L. A., *see* Kolb, N. S., 797
- I**
- Ijzerman, A. P., *see* van Galen, P. J. M., 1101
- Innis, R. B., *see* Scanley, B. E., 136
- Itoh, S., *see* Sakuma, T., 228
- Iversen, L. J., *see* Blaxall, H. S., 176
- Iversen, L. J., *see* Cerutis, D. R., 20
- J**
- Jacinto, M. T., *see* Eason, M. G., 696
- Jackman, A., *see* Sanghani, P. C., 341
- Jacobson, K. A., *see* Olah, M. E., 978
- Jacobson, K. A., *see* Palmer, T. M., 1082
- Jacobson, K. A., *see* van Galen, P. J. M., 1101
- Jacquemin-Sablon, A., *see* Agbotounou, W. K., 922
- Jakobs, K. H., *see* Offermanns, S., 890
- Janowsky, A., *see* Eshleman, A. J., 312
- Jefcoate, C. R., *see* Savas, Ü., 1153
- Jeffrey, J. J., *see* Du, Y.-L., 1125
- Jensen, C. J., Gerard, N. P., Schwartz, T. W., and Gether, U. The species selectivity of chemically distinct tachykinin nonpeptide antagonists is dependent on common divergent residues of the rat and human neurokinin-1 receptors, 294
- Johansen, T. E., *see* Gether, U., 500
- Johns, D. G., *see* Agbaria, R., 777
- Johnson, M. P., Loncharich, R. J., Baez, M., and Nelson, D. L. Species variations in transmembrane region V of the 5-hydroxytryptamine type 2A receptor alter the structure-activity relationship of certain ergolines and tryptamines, 277
- K**
- Kamataki, T., *see* Sakuma, T., 228
- Kanematsu, T., *see* Hirata, M., 271
- Kargman, S., Ali, A., Vaillancourt, J. P., Evans, J. F., and Nicholson, D. W. Protein kinase C-dependent regulation of sulfidopeptide leukotriene biosynthesis and leukotriene C₄ synthase in neutrophilic HL-60 cells, 1043
- Kargman, S., *see* O'Neill, G. P., 245
- Karkanas, G. B., and Etgen, A. M. Estradiol reduction of the agonist high affinity form of the α_2 -adrenoceptor in the hypothalamus of female rats: Identification as the α_{2D} subtype, 509
- Karmilowicz, M. J., *see* Grissmer, S., 1227
- Kase, H., *see* Tanaka, T., 724
- Katz, M., *see* Peng, X., 546
- Kazaniets, M. G., *see* Seynaeve, C. M., 1207
- Keefer, J. R., Nunnar, J., Pang, I. H., and Limbird, L. E. Introduction of purified α_2 -adrenergic receptors into uniformly oriented, unilamellar, phospholipid vesicles: Productive coupling to G proteins but lack of receptor-dependent ion transport, 1071
- Kennedy, B. P., *see* O'Neill, G. P., 245
- Kiedrowski, L., Wroblewski, J. T., and Costa, E. Intracellular sodium concentration in cultured cerebellar granule cells challenged with glutamate, 1050
- Kim, K.-M., Kingsmore, S. F., Han, H., Yang-Feng, T. L., Godinot, N., Seldin, M. F., Caron, M. G., and Giros, B. Cloning of the human glycine transporter type 1: molecular and pharmacological characterization of novel isoform variants and chromosomal localization of the gene in the human and mouse genomes, 608
- Kingsmore, S. F., *see* Kim, K.-M., 608
- Kinzie, J. M., *see* Saugstad, J. A., 367
- Kish, S. J., *see* Pristupa, Z. B., 125
- Kletzien, R. F., *see* Harris, P. W. K., 439
- Knickle, L. C., and Bend, J. R. Bioactivation of arachidonic acid by the cytochrome P450 monooxygenases of guinea pig lung: The orthologue of cytochrome P450 2B4 is solely responsible for formation of epoxyeicosatrienoic acids, 1273
- Kobayashi, S., Tang, R., Wang, B., Oppenorth, T., Langenstroer, P., Shapiro, E., and Lepor, H. Binding and functional properties of endothelin receptor subtypes in the human prostate, 306
- Koga, T., *see* Hirata, M., 271
- Köhnlein, W., *see* Schönlauf, F., 1268
- Kolb, N. S., Hunsaker, L. A., and Vander Jagt, D. L. Aldose reductase-catalyzed reduction of acrolein: Implications in cyclophosphamide toxicity, 797
- Kondo, Y., *see* Akbar, M., 1036

- Kong, H., *see* Raynor, K., 330
Konvicka, K., *see* Zhou, W., 165
Korpi, E. R., *see* Lddens, H., 810
Korzekwa, K. R., *see* Relling, M. V., 352
Krauss, S. W., Diamond, I., and Gordon, A. S. Selective inhibition by ethanol of the type 1 glucose transporter, 1281
Kretz-Rommel, A., and Boelsterli, U. A. Selective protein adducts to membrane proteins in cultured rat hepatocytes exposed to diclofenac: Radiochemical and immunochemical analysis, 237
Kronman, C., *see* Ashani, J., 555
Kugler, J. L., *see* Yano, H., 854
Kuiper, J., *see* van de Water, B., 971
Kukuljan, M., *see* Stojilkovic, S. S., 1013
Kumagai, Y., Lin, L. Y., Hiratsuka, A., Narimatsu, S., Suzuki, T., Yamada, H., Oguri, K., Yoshimura, H., and Cho, A. K. Participation of cytochrome P450-2B and -2D isozymes in the demethylation of the methylenedioxymethamphetamine enantiomers by rats, 359
Kuttesch, J. F., *see* Sosinski, J. F., 962
Kuzmenko, Y. S., *see* Bochkov, V. N., 262
Kwan, M. Y., *see* O'Neill, G. P., 245

L

- Lachowicz, J. E., *see* Zhang, L.-J., 878
Lajiness, M. E., *see* Chio, C. L., 51
Langenstroer, P., *see* Kobayashi, S., 306
Lanier, S. M., *see* Tian, W.-N., 524
Laruelle, M., *see* Scanley, B. E., 136
Lassmann, G., *see* Pötsch, S., 792
Law, P. Y., *see* Prather, P. L., 997
Law, S. F., Zaina, S., Sweet, R., Yasuda, K., Bell, G. I., Stadel, J., and Reisine, T. G. Selectively couples somatostatin receptor subtype 3 to adenylyl cyclase: identification of the functional domains of this α subunit necessary for mediating the inhibition by somatostatin of cAMP formation, 587
Lazarovici, P., *see* Rasouly, D., 29
Lazo, J. S., *see* Yang, Y.-Y., 453
Le Beau, M. M., *see* Yano, H., 854
Lefkowitz, R. J., *see* Price, D. T., 171
Lefkowitz, R. J., *see* Samama, P., 390
Le Guern, J., *see* Pradier, L., 287
Lepor, H., *see* Forray, C., 703
Lepor, H., *see* Kobayashi, S., 306
Leppik, R. A., Miller, R. C., Eck, M., and Paquet, J.-L. Role of acidic amino acids in the allosteric modulation by gallamine of antagonist binding at the m2 muscarinic acetylcholine receptor, 983
Levitzki, A., *see* Agbotounou, W. K., 922
Levitzki, A., *see* Posner, I., 673
Li, W. Y., *see* Simmons, L. K., 373
Lieberburg, I., *see* Simmons, L. K., 373
Liermann, B., *see* Pötsch, S., 792
Liggett, S. B., *see* Eason, M. G., 696
Limberger, N., *see* Trendelenburg, A.-U., 1168
Limbird, L. E., *see* Keefer, J. R., 1071
Lin, L. Y., *see* Kumagai, Y., 359
Lindstrom, J., *see* Peng, X., 546
Linstrom, J., *see* Gerzanich, V., 212
Little, J., *see* Aharony, D., 9
Liu, G., Abramson, J. J., Zable, A. C., and Pessah, I. N. Direct evidence for the existence and functional role of hyperreactive sulfhydryls on ryanodine receptor-triadin complex selectivity labeled by the coumarin maleimide 7-diethylamino-3-(4'-maleimidylphenyl)-4-methylcoumarin, 189
Liu, J., Bangalore, R., Rutledge, A., and Triggle, D. J. Modulation of L-type Ca^{2+} channels in clonal rat pituitary cells by membrane depolarization, 1198
Liu, Y., Dilger, J. P., and Vidal, A. M. Effects of alcohols and volatile

- anesthetics on the activation of nicotinic acetylcholine receptor channels, 1235
Logothetis, D. E., *see* Castle, N. A., 1242
Loh, H. H., *see* Prather, P. L., 997
Loncharich, R. J., *see* Johnson, M. P., 277
Loyevsky, M., and Cabantchik, Z. I. Antimalarial action of hydrophilic drugs: involvement of aqueous access routes to intracellular parasites, 446
Lüddens, H., Seeburg, P. H., and Korpi, E. R. Impact of β and γ variants on ligand-binding properties of γ -aminobutyric acid type A receptors, 810
Lujan, J., *see* Hilal-Dandan, R., 1183
Lynch, D. R., Anegawa, N. J., Verdoorn, T., and Pritchett, D. B. N-Methyl-D-aspartate receptors: Different subunit requirements for binding of glutamate antagonists, glycine antagonists, and channel-blocking agents, 540

M

- Maayani, S., *see* Berg, K. A., 826
MacDonald, J. F., *see* Church, J., 747
Mackenzie, P., *see* Pritchard, M., 42
MacNeil, T., *see* Hess, J. F., 1
Magdalou, J., *see* Pritchard, M., 42
Maggs, J. L., *see* Stalford, A. C., 1259
Mak, J. C. W., *see* Haddad, E.-B., 899
Mancini, J. A., *see* O'Neill, G. P., 245
Martinez, J., *see* Poirot, S. S., 599
Masaki, K., *see* Sakuma, T., 228
Masood, K., Wu, C., Brauneis, U., and Weight, F. F. Differential ethanol sensitivity of recombinant N-methyl-D-aspartate receptor subunits, 324
Massoulié, J., *see* Eichler, J., 335
Mather, R. J., *see* Grissmer, S., 1227
Matsuda, Y., *see* Rasouly, D., 29
Matsuda, Y., *see* Tanaka, T., 724
May, P. C., *see* Simmons, L. K., 373
Mayaux, J.-F., *see* Pradier, L., 287
Mayer, R. T., *see* Taylor, J. L., 74
Mayer, S. E., and Sanders-Bush, E. 5-Hydroxytryptamine type 2A and 2C receptors linked to $\text{Na}^+/\text{K}^+/\text{Cl}^-$ cotransport, 991
McIntyre, P., Phillips, E., Skidmore, E., Brown, M., and Webb, M. Cloned murine bradykinin receptor exhibits a mixed B_1 and B_2 pharmacological selectivity, 561
McKay, R. D. G., *see* Berg, K. A., 826
McKernan, R. M., *see* Quirk, K., 1061
Melman, N., *see* van Galen, P. J. M., 1101
Ménager, J., *see* Pradier, L., 287
Merck, D., *see* Hilal-Dandan, R., 1183
Millar, R. P., *see* Zhou, W., 165
Miller, K. W., *see* Wu, G., 102
Miller, R. C., *see* Leppik, R. A., 983
Miller, R. J., *see* Glaum, S. R., 1221
Min, C. K., Owens, J., and Weiland, G. A. Characterization of the binding of [^3H]substance P to the nicotinic acetylcholine receptor of *torpedo* electroplaque, 221
Minneman, K. P., *see* Esbenshade, T. A., 591
Mio, M., *see* Tasaka, K., 837
Molinoff, P. B., *see* Williams, K., 803
Molinoff, P. B., *see* Zhong, J., 846
Moran, R. G., *see* Sanghani, P. C., 341
Muarakata, C., *see* Rasouly, D., 29
Mullen, C. A., *see* Agbaria, R., 777
Mulvihill, E. R., *see* Saugstad, J. A., 367
Murray, J. J., *see* Feoktistov, I., 1160
Musto, N. A., *see* Garnier, M., 201
Myers, R. M., *see* Garcia, P. D., 402

N

- Nakaya, N., *see* Tasaka, K., 837
 Nare, B., Prichard, R. K., and Georges, E. Characterization of rhodamine 123 binding to P-glycoprotein in human multidrug-resistant cells, 1145
 Narimatsu, S., *see* Kumagai, Y., 359
 Narumoto, N., *see* Hirata, M., 271
 Nelson, D. J., *see* Yano, H., 854
 Nelson, D. L., *see* Johnson, M. P., 277
 Nemec, J., *see* Relling, M. V., 352
 Neubig, R. R., *see* Wade, S. M., 1191
 Neuhaus-Steinmetz, U., Xu, C., Riccella, F., Oberheitmann, B., Richter-Landsberg, C., and Rensing, L. Heat shock response and cytotoxicity in C6 rat glioma cells; Structure-activity relationship of different alcohols, 36
 Neumeyer, J. L., *see* Scanley, B. E., 136
 Neve, K. A., *see* Eshleman, A. J., 312
 Nguyen, A. N., *see* Grissmer, S., 1227
 Nicholson, D. W., *see* Kargman, S., 1043
 Niznik, H. B., *see* Panetta, R., 417
 Niznik, H. B., *see* Pristupa, Z. B., 125
 Nonaka, H., *see* Tanaka, T., 724
 Nozawa, M., *see* Tanaka, T., 724
 Nunnar, J., *see* Keefer, J. R., 1071
 Nussenzweig, D. R., *see* Falck-Pedersen, 684
 Nutt, K. M., *see* Boss, V., 1177
 Nutter, L. M., *see* Werth, J. L., 1119

O

- Oberheitmann, B., *see* Neuhaus-Steinmetz, U., 36
 Offermanns, S., *see* Seifert, R., 578
 Offermanns, S., Wieland, T., Homann, D., Sandmann, J., Bombien, E., Spicher, K., Schultz, G., and Jakobs, K. H. Transfected muscarinic acetylcholine receptors selectively couple to G_i-type G proteins and G_{q/11}, 890
 Oguri, K., *see* Kamagai, Y., 359
 Ohno, T., *see* Tanaka, T., 724
 Okajima, F., *see* Akbar, M., 1036
 Olah, M. E., Gallo-Rodriguez, C., Jacobson, K. A., and Stiles, G. L. ¹²⁵I-4-aminobenzyl-5'-N-methylcarboxamidoadenosine, a high affinity radioligand for the rat A₃ adenosine receptor, 978
 Olah, M. E., *see* van Galen, P. J. M., 1101
 O'Neill, G. P., Mancini, J. A., Kargman, S., Yergey, J., Kwan, M. Y., Falgoutret, J.-P., Abramovitz, M., Kennedy, B. P., Ouellet, M., Cromlish, W., Culp, S., Evans, J. F., Ford-Hutchinson, A. W., and Vickers, P. J. Overexpression of human prostaglandin G/H synthase-1 and -2 by recombinant vaccinia virus: Inhibition by non-steroidal anti-inflammatory drugs and biosynthesis of 15-hydroxyicosatetraenoic acid, 245
 Opgenorth, T., *see* Kobayashi, S., 306
 Oswald, R. E., *see* Stafford, G. A., 758
 Otterness, D. M., *see* Girard, B., 461
 Ouellet, M., *see* O'Neill, G. P., 245
 Owens, J., *see* Min, C. K., 221
 Ozaki, S., *see* Hirata, M., 271

P

- Palmer, T. M., Gettys, T. W., Jacobson, K. A., and Stiles, G. L. Desensitization of the canine A_{2a} adenosine receptor: Delineation of multiple processes, 1082
 Panetta, R., Greenwood, M. T., Warszynska, A., Demchyshyn, L. L., Day, R., Niznik, H. B., Srikant, C. B., and Patel, Y. C. Molecular cloning, functional characterization, and chromosomal localization of a human somatostatin receptor (somatostatin receptor type 5) with preferential affinity for somatostatin-28, 417
 Pang, I. H., *see* Keefer, J. R., 1071
 Papadopoulos, V., *see* Garnier, M., 201

- Papke, R. L., and Heinemann, S. F. Partial agonist properties of cytosine on neuronal nicotinic receptors containing the $\beta 2$ subunit, 142
 Paquet, J.-L., *see* Leppik, R. A., 983
 Park, B. K., *see* Stalford, A. C., 1259
 Parrillo, C., *see* Calderaro, V., 737
 Pastan, I., *see* Stein, W. D., 763
 Patel, Y. C., *see* Panetta, R., 417
 Pei, G., *see* Samama, P., 390
 Peng, X., Katz, M., Gerzanich, V., Anand, R., and Lindstrom, J. Human $\alpha 7$ acetylcholine receptor: Cloning of the $\alpha 7$ subunit from the SH-SY5Y cell line and determination of the pharmacological properties of native receptors and functional $\bar{\gamma}$ homomers expressed in *xenopus* oocytes, 546
 Penney, J. B., *see* Catania, M. V., 626
 Perkins, L., *see* Thomson, F. J., 718
 Pessah, I. N., *see* Liu, G., 189
 Pessayre, D., *see* Bourdi, M., 1287
 Pheng, L.-H., *see* Fournier, A., 93
 Philipson, L. H., *see* Yano, H., 854
 Phillips, E., *see* McIntyre, P., 561
 Pierre, J., *see* Agbotonou, W. K., 922
 Piersen, C. E., True, C. D., and Wells, J. N. ¹²⁵I-2-[4-[2-[2-[(4-azido-phenyl)methylcarbonylamino]ethylaminocarbonyl]ethyl]-phenyl]ethylamino-5'-N-ethylcarboxamidoadenosine labels transmembrane span V of the A_{2a} adenosine receptor, 871
 Piersen, C. E., True, C. D., and Wells, J. N. A carboxyl-terminally truncated mutant and nonglycosylated A_{2a} adenosine receptors retain ligand binding, 861
 Pin, J. P., *see* Prézeau, L., 570
 Pirotzky, E., *see* Roubert, P., 182
 Pittel, Z., and Wess, J. Intramolecular interactions in muscarinic acetylcholine receptors studied with chimeric m2/m5 receptors, 61
 Plas, P., *see* Roubert, P., 182
 Plopper, C. G., *see* Chichester, C. H., 664
 Poirot, S. S., Escrieut, C., Dufresne, M., Martinez, J., Bouisson, M., Vaysse, N., and Fourmy, D. Photoaffinity labeling of rat pancreatic cholecystokinin type A receptor antagonist binding sites demonstrates the presence of a truncated cholecystokinin type A receptor, 599
 Poland, A., *see* Pollenz, R. S., 428
 Pollenz, R. S., Sattler, C. A., and Poland, A. The aryl hydrocarbon receptor and aryl hydrocarbon receptor nuclear translocator protein show distinct subcellular localizations in HEPA lc1c7 cells by immunofluorescence microscopy, 428
 Polsky, B., *see* Prochaska, H. J., 916
 Posner, I., Engel, M., Gazit, A., and Levitzki, A. Kinetics of inhibition by tyrosinase of the tyrosine kinase activity of the epidermal growth factor receptor and analysis by a new computer program, 673
 Posner, R. G., Fay, S. P., Domalewski, M. D., and Sklar, L. A. Continuous spectrofluorometric analysis of formyl peptide receptor ternary complex interactions, 65
 Pötsch, S., Drechsler, H., Liermann, B., Gräslund, A., and Lassman, G. *p*-Alkoxyphenols, a new class of inhibitors of mammalian R2 ribonucleotide reductase: Possible candidates for antimelanotic drugs, 792
 Pourmarin, L., *see* Roubert, P., 182
 Powell, S., *see* Aharony, D., 9
 Pradier, L., Ménager, J., Le Guern, J., Bock, M.-D., Heuillet, E., Fardin, V., Garret, C., Doble, A., and Mayaux, J.-F. Septide: an agonist for the NK1 receptor acting at a site distinct from substance P, 287
 Pradier, L., *see* Gether, U., 500
 Pradier, L., *see* Hebert, T., 1055
 Prather, P. L., Loh, H. H., and Law, P. Y. Interaction of δ -opioid receptors with multiple G proteins: A non-relationship between

- agonist potency to inhibit adenylyl cyclase and to activate G proteins, 997
- Prézeau, L., Carrette, J., Helpap, B., Curry, K., Pin, J. P., and Bockaert, J. Pharmacological characterization of metabotropic glutamate receptors in several types of brain cells in primary cultures, 570
- Price, D. T., Lefkowitz, R. J., Caron, M. G., Berkowitz, D. and Schwinn, D. A. Localization of mRNA for three distinct α_1 -adrenergic receptor subtypes in human tissues: Implications for human α -adrenergic physiology, 171
- Price, J. M., *see* Garnier, M., 201
- Prichard, R. K., *see* Nare, B., 1145
- Pristupa, Z. B., Wilson, J. M., Hoffman, B. J., Kish, S. J., and Niznik, H. B. Pharmacological heterogeneity of the cloned and native human dopamine transporter; Disassociation of [3 H]WIN 35,428 and [3]GBR 12,935 binding, 125
- Pritchard, M., Fournel-Gigleux, S., Siest, G., Mackenzie, P., and Magdalou, J. A recombinant phenobarbital-inducible rat liver UDP-glucuronosyltransferase (UDP-glucuronosyltransferase 2B1) stably expressed in V79 cells catalyzes the glucuronidation of morphine, phenols, and carboxylic acids, 42
- Pritchett, D. B., *see* Lynch, D. R., 540
- Pritchett, D. B., *see* Williams, K., 803
- Pritchett, D. B., *see* Zhong, J., 846
- Prochaska, H. J., Robinson, L., Yeh, Y., Baron, P., and Polsky, B. Elevation of glutathione levels by phase II enzyme inducers: Lack of inhibition of human immunodeficiency virus type 1 replication in chronically infected monocytoid cells, 916
- Proška, J., and Tuček, S. Mechanisms of steric and cooperative actions of alcuronium on cardiac muscarinic acetylcholine receptors, 709
- Purkiss, J. R., *see* Wilkinson, G. F., 731

Q

- Quirion, R., *see* Fournier, A., 93
- Quirk, K., Gillard, N. P., Ragan, C. I., Whiting, P. J., and McKernan, R. M. γ -Aminobutyric acid type A receptors in the rat brain can contain both γ_2 and γ_3 subunits, but γ_1 does not exist in combination with another γ subunit, 1061

R

- Ragan, C. I., *see* Quirk, K., 1061
- Rahamim, E., *see* Rasouly, D., 29
- Randolph, J. K., *see* Fornari, F. A., 649
- Ransom, R. W., *see* Hess, J. F., 1
- Rao, U. S., and Scarborough, G. A. Direct demonstration of high affinity interactions of immunosuppressant drugs with the drug binding site of the human P-glycoprotein, 773
- Rashba-Step, J. and Cederbaum, A. I. Generation of reactive oxygen intermediates by human liver microsomes in the presence of NADPH or NADH, 150
- Rasouly, D., Rahamim, E., Ringel, I., Ginzburg, I., Muarakata, C., Matsuda, Y., and Lazarovici, P. Neurites induced by staurosporine in PC12 cells are resistant to colchicine and express high levels of tau proteins, 29
- Raynor, K., Kong, H., Chen, Y., Yasuda, K., Yu, L., Bell, G. I. and Reisine, T. Pharmacological characterization of the cloned κ -, δ -, and μ -opioid receptors, 330
- Reese, C. E., *see* Yang, Y.-Y., 453
- Reiners, J. J., Jr., *see* Schöller, A., 944
- Reisine, T., *see* Law S. F., 587
- Reisine, T., *see* Raynor, D., 330
- Relling, M. V., Nemec, J., Schuetz, E. G., Schuetz, J. D., Gonzalez, F. J., and Korzekwa, K. R. O-Demethylation of epipodophyllotoxins is catalyzed by human cytochrome P450 3A4, 352
- Rensing, L., *see* Neuhaus-Steinmetz, U., 36
- Resink, T. J., *see* Bochkov, V. N., 262
- Rhee, M. S., Galivan, J., Wright, J. E., and Rosowsky, A. Biochemical studies on P110123, a potent nonpolyglutamatable antifolate, in cultured cells, 783

- Richter-Landsberg, C., *see* Neuhaus-Steinmetz, U., 36
- Ringel, I., *see* Rasouly, D., 29
- Ritke, M. K., *see* Fornari, F. A., 649
- Robberecht, P., *see* Vilardaga, J. P., 1022
- Robbins, E., *see* Saporito, M. S., 395
- Rogawski, M. A., *see* Subramaniam, S., 117
- Rosenberg, H. C., *see* Zhao, T.-J., 657
- Rosowsky, A., *see* Rhee, M. S., 783
- Rossi, F., *see* Calderaro, V., 737
- Roubert, P., Gillard-Roubert, V., Pourmarin, L., Cornet, S., Guilmard, C., Plas, P., Pirotzky, E., Chabrier, P. E., and Braquet, P. Endothelin receptor subtypes A and B are upregulated in an experimental model of acute renal failure, 182
- Rubinson, L., *see* Prochaska, H. J., 916
- Rump, L. C., *see* Trendelenburg, A.-U., 1168
- Russell, S. L., *see* Zhong, J., 846
- Rutledge, A., *see* Liu, J., 1198
- Rydel, R. E., *see* Simmons, L. K., 373

S

- Sah, D. W. Y., and Bean, B. P. Inhibition of P-type and N-type calcium channels by dopamine receptor antagonists, 84
- Saijo, N., *see* Yang, Y.-Y., 453
- Sakuma, T., Masaki, K., Itoh, S., Yokoi, T., and Kamataki, T. Sex-related differences in the expression of cytochrome P450 in hamsters: cDNA cloning and examination of the expression of three distinct CYP2C cDNAs, 228
- Samama, P., Pei, G., Costa, T., Cotecchia, S., and Lefkowitz, R. J. Negative antagonists promote an inactive conformation of the β_2 -adrenergic receptor, 390
- Sanders-Bush, E., *see* Mayer, S. E., 991
- Sandmann, J., *see* Offermanns, S., 890
- Sands, H., Gorey-Feret, L. J., Cocuzza, A. J., Hobbs, F. W., Chidester, D., and Trainor, G. L. Biodistribution and metabolism of internally 3 H-labeled oligonucleotides. I. Comparison of a phosphodiester and a phosphorothioate, 932
- Sanghani, P. C., Jackman, A., Evans, V. R., Thornton, T., Hughes, L., Calvert, A. H., and Moran, R. G. A strategy for the design of the membrane-permeable folypoly- γ -glutamate synthetase inhibitors: 'bay-region'-substituted 2-desamino-2-methyl-5,8-dideazafolate analogs, 341
- Sanna, E., Dildy-Mayfield, J. E., and Harris R. A. Ethanol inhibits the function of 5-hydroxytryptamine type 1c and muscarinic M₁ G protein-linked receptors in *Xenopus* oocytes expressing brain mRNA: Role of protein kinase C, 1004
- Saporito, M. S., Brown, E. R., Hartpence, K. C., Wilcox, H. M., Robbins, E., Vaught, J. L., and Carswell, S. Systemic dexamethasone administration increases septal Trk autophosphorylation in adult rats via an induction of nerve growth factor, 5, 39
- Sattler, C. A., *see* Pollenz, R. S., 428
- Saugstad, J. A., Kinzie, J. M., Mulvihill, E. R., Segerson, T. P., and Westbrook, G. L. Cloning and expression of a new member of the L-2-amino-4-phosphonobutyric acid-sensitive class of metabotropic glutamate receptors, 367
- Sausville, E. A., *see* Seynaeve, C. M., 1207
- Savas, Ü., and Jefcoate, C. R. Dual regulation of cytochrome P450EF expression via the aryl hydrocarbon receptor and protein stabilization in C3H/101061/2 cells, 1153
- Scanley, B. E., Baldwin, R. M., Laruelle, M., Al-Tikriti, M. S., Zea-Ponce, Y., Zoghbi, S., Giddings, S. S., Charney, D. S., Hoffer, P. B., Wang, S., Gao, Y., Neumeyer, J. L., and Innis, R. B. Active and inactive enantiomers of 2 β -carbomethoxy-3 β -(4-iodophenyl)tropane: Comparison using homogenate binding and single photon emission computed tomographic imaging, 136
- Scarborough, G. A., *see* Rao, U. S., 773
- Scheiner-Bobis, G., zu Heringdorf, D. M., Christ, M., and Habermann,

- E. Palytoxin induces K⁺ efflux from yeast cells expressing the mammalian sodium pump, 1132
- Schmid, E., Figala, V., and Ullrich, V. Inhibition of NADPH-oxidase activity in human polymorphonuclear neutrophils by lipophilic ascorbic acid derivatives, 815
- Schmidt, U., *see* Böhm, M., 380
- Schöller, A., Hong, N. J., Bischer, P., and Reiners, J. J., Jr. Short and long term effects of cytoskeleton-disrupting drugs on cytochrome P450 *Cyp1a-1* induction in murine hepatoma 1c1c7 cells: Suppression by the microtubule inhibitor nocodazole, 944
- Schönlau, F., and Köhnlein, W. The acidic groups of the neocarzinostatin protein play an important role in its biological activity, 1268
- Schuetz, E. G., *see* Relling, M. V., 352
- Schuetz, J. D., *see* Relling, M. V., 352
- Schultz, G., *see* Offermanns, S., 890
- Schultz, G., *see* Seifert, R., 578
- Schunack, W., *see* Seifert, R., 578
- Schwaner, I., *see* Seifert, R., 578
- Schwartz, T. W., *see* Gether, U., 500
- Schwartz, T. W., *see* Jensen, C. J., 294
- Schwinger, R. H. G., *see* Böhm, M., 380
- Schwinn, D. A. *see* Price, D. T., 171
- Sealfon, S. C., *see* Zhou, W., 165
- Seeburg, P. H., *see* Lüddens, H., 810
- Segerson, T. P., *see* Saugstad, J. A., 367
- Seifert, R., Hagelüken, A., Höer, A., Höer, D., Grünbaum, L., Offermanns, S., Schwaner, I., Zingel, V., Schunack, W., and Schultz, G. The H₁ receptor agonist 2-(3-chlorophenyl)histamine activates G_i proteins in HL-60 cells through a mechanism that is independent of known histamine receptor subtypes, 578
- Seldin, M. F., *see* Kim, K.-M., 608
- Selinfreund, R. H., and Blair, L. A. C. Insulin-like growth factor-I induces a rapid increase in calcium currents and spontaneous membrane activity in clonal pituitary cells, 1215
- Servant, G., Dudley, D. T., Escher, E., and Guillemette, G. The marked disparity between the sizes of angiotensin type 2 receptors from different tissues is related to different degrees of *N*-glycosylation, 1112
- Seynaeve, C. M., Kazanietz, M. G., Blumberg, P. M., Sausville, E. A., and Worland, P. J. Differential inhibition of protein kinase C isozymes by UCN-01, a staurosporine analogue, 1207
- Shaffer, A., *see* Ashani, J., 555
- Shapiro, E., *see* Forray, C., 703
- Shapiro, E., *see* Kobayashi, S., 306
- Shen, Y. M., *see* Williams, K., 803
- Shenk, T., *see* Toth, M., 1095
- Shimegi, S., *see* Akbar, M., 1036
- Sibley, D. R., *see* Zhang, L.-J., 578
- Siest, G., *see* Pritchard, M., 42
- Silman, I., *see* Eichler, J., 335
- Simmons, L. K., May, P. C., Tomaselli, K. J., Rydel, R. E., Fuson, K. S., Brigham, E. F., Wright, S., Lieberburg, I., Becker, G. W., Brems, D. N., and Li, W. Y. Secondary structure of amyloid β peptide correlates with neurotoxic activity *in vitro*, 373
- Skidmore, E., *see* McIntyre, P., 561
- Sklar, L. A., *see* Posner, R. G., 65
- Song, S.-L., *see* Chueh, S.-H., 532
- Sosinski, J., Thakar, J. H., Germain, G. S., Dias, P., Harwood, F. C., Kuttesch, J. F., and Houghton, P. J. Cross-resistance to antitumor diarylsulfonylureas and collateral sensitivity to mitochondrial toxins in a human cell line selected for resistance to the antitumor agent *N*-(5-indanylsulfonyl)-*N'*-(4-chlorophenyl)urea, 962
- Spicher, K., *see* Offermanns, S., 890
- Srikant, C. B., *see* Panetta, R., 417
- Stadel, J., *see* Law, S. F., 587
- Stafford, G. A., Oswald, R. E., and Weiland, G. A. The β subunit of neuronal nicotinic acetylcholine receptors is a determinant of the affinity for substance P inhibition, 758
- Stalford, A. C., Maggs, J. L., Gilchrist, T. L., and Park, B. K. Catecholestrogens as mediators of carcinogenesis: Correlation of aromatic hydroxylation of estradiol and its fluorinated analogs with tumor induction in Syrian hamsters, 1259
- Stein, W. D., Cardarelli, C., Pastan, I., and Gottesman, M. M. Kinetic evidence suggesting that the multidrug transporter differentially handles influx and efflux of its substrates, 763
- Stiles, G. L., *see* Olah, M. E., 978
- Stiles, G. L., *see* Palmer, T. M., 1082
- Stiles, G. L., *see* van Galen, P. J. M., 1101
- Stojilkovic, S. S., Tomić, M., Kukuljan, M., and Catt, K. J. Control of calcium spiking frequency in pituitary gonadotrophs by a single-pool cytoplasmic oscillator, 1013
- Stonesifer, G. Y., *see* Hess, J. F., 1
- St-Pierre, S., *see* Fournier, A., 93
- Strader, C. D., *see* Hess, J. F., 1
- Strader, C. D., *see* Huang, R.-R. C., 690
- Strnad, J., *see* Hadcock, J. R., 410
- Strobel, L. S., *see* Clapper, M. L., 469
- Suarato, A., *see* Capranico, G., 908
- Subramaniam, S., Donevan, S. D., and Rogawski, M. A. Hydrophobic interactions of *n*-Alkyl diamines with the *N*-Methyl-D-aspartate receptor: Voltage-dependent and -independent blocking sites, 117
- Supino, R., *see* Capranico, G., 908
- Sussman, J. L., *see* Eichler, J., 335
- Suzuki, T., *see* Kumagai, Y., 359
- Sweet, R., *see* Law, S. F., 587

T

- Takeda, J., *see* Yano, H., 854
- Tanaka, T., Tsukuda, E., Nozawa, M., Nonaka, H., Ohno, T., Kase, H., Yamada, K., and Matsuda, Y. RES-701-1, a novel, potent, endothelin type B receptor-selective antagonist of microbial origin, 724
- Tang, R., *see* Forray, C., 703
- Tang, R., *see* Kobayashi, S., 306
- Tasaka, K., Doi, M., Nakaya, N., and Mio, M. Reinforcement effect of histamine on the differentiation of murine myeloblasts and promyelocytes: Externalization of granulocyte colony-stimulating factor receptors induced by histamine, 837
- Taylor, J. L., Mayer, R. T., and Himel, C. M. Conformers of acetylcholinesterase: A mechanism of allosteric control, 74
- Teitler, M., *see* Du, Y.-L., 1125
- Thakar, J. H., *see* Sosinski, J. F., 962
- Thayer, S. A., *see* Werth, J. L., 1119
- Theroux, T. L., *see* Esbenshade, T. A., 591
- Thomas, C., *see* Aharony, D., 9
- Thomson, F. J., Perkins, L., Ahern, D., and Clark, M. Identification and characterization of a lysophosphatidic acid receptor, 718
- Thorens, B., *see* Widmann, C., 1029
- Thornton, T., *see* Sanghani, P. C., 341
- Tian, W.-N., Duzic, E., Lanier, S. M., and Deth, R. C. Determinants of α_2 -adrenergic receptor activation of G proteins: Evidence for a precoupled receptor/G state, 524
- Ticku, M. K., *see* Hu, X.-J., 618
- Tinel, M., *see* Bourdi, M., 1287
- Tkachuk, V. A., *see* Bochkov, V. N., 262
- Toews, M. L., *see* Zhu, S.-J., 255
- Tokuyama, Y., *see* Yano, H., 854
- Tomaselli, K. J., *see* Simmons, L. K., 373
- Tomić, M., *see* Stojilkovic, S. S., 1013
- Tomura, H., *see* Akbar, M., 1036
- Tonner, P. H., *see* Wu, G., 102
- Toth, M., and Shenk, T. Antagonist-mediated down-regulation of 5-

- hydroxytryptamine type 2 receptor gene expression: Modulation of transcription, 1095
- Townsend, A. J., *see* Clapper, M. L., 469
- Trainor, G. L., *see* Sands, H., 932
- Trendelenburg, A.-U., Limberger, N., and Rump, L. C. α_2 -Adrenergic receptors of the α_{2c} subtype mediate inhibition of norepinephrine release in human kidney cortex, 1168
- Triggle, D. J., *see* Liu, J., 1198
- True, C. D., *see* Piersen, C. E., 861, 871
- Tsukuda, E., *see* Tanaka, T., 724
- Tuček, S., *see* Prošaška, J., 709
- U**
- Ullrich, V., *see* Schmid, E., 815
- V**
- Vaillancourt, J. P., *see* Kargman, S., 1043
- Valiquette, M., *see* Chidiac, P., 490
- van Bergen, A. H., *see* van Galen, P. J. M., 1101
- van Berkel, T. J. C., *see* van de Water, B., 971
- Vander Jagt, D. L., *see* Kolb, N. S., 797
- van de Water, B., van Berkel, T. J. C., and Kuiper, J. Activation of rat Kupffer cells to tumoricidal cells by the immunomodulator muramyl tripeptide-phosphatidylethanolamine incorporated into the novel drug carrier lactosylated low density lipoprotein, 971
- van Galen, P. J. M., van Bergen, A. H., Gallo-Rodriguez, C., Melman, N., Olah, M. E., Ijzerman, A. P., Stiles, G. L., and Jacobson, K. A. A binding site model and structure-activity relationships for the rat A_3 adenosine receptor, 1101
- Vaught, J. L., *see* Saporito, M. S., 395
- Vayasse, N., *see* Poirot, S. S., 599
- Veitch, K., and Hue, L. Flunarizine and cinnarizine inhibit mitochondrial complexes I and II: Possible implication for Parkinsonism, 158
- Velan, B., *see* Ashani, J., 555
- Verdoorn, T., *see* Lynch, D. R., 540
- Verdoorn, T. A. Formation of heteromeric γ -aminobutyric acid type A receptors containing two different α subunits, 475
- Vickers, P. J., *see* O'Neill, G. P., 245
- Vidal, A. M., *see* Liu, Y., 1235
- Villardaga, J. P., Ciccirelli, E., Dubeaux, C., de Neef, P., Bollen, A., and Robberecht, P. Properties and Regulation of the coupling to adenylate cyclase of secretin receptors stably transfected in chinese hamster ovary cells, 1022
- Völkl, H., *see* Dietl, P., 300
- W**
- Wade, S. M., Dalman, H. M., Yang, S.-Z., and Neubig, R. R. Multisite interactions of receptors and G proteins: Enhanced potency of dimeric receptor peptides in modifying G protein function, 1191
- Walker, R. T., *see* Balzarini, J., 1253
- Walsh, K. B., *see* Cannon, S. D., 109
- Wang, B., *see* Kobayashi, S., 306
- Wang, G. K., *see* Castle, N. A., 1242
- Wang, S., *see* Scanley, B. E., 136
- Wang, S. Z., *see* Zhu, S. Z., 517
- Warszynska, A., *see* Panetta, R., 417
- Watanabe, Y., *see* Hirata, M., 271
- Webb, M., *see* McIntyre, P., 561
- Weiben, E. D., *see* Girard, B., 461
- Weight, F. F., *see* Masood, K., 324
- Weiland, G. A., *see* Min, C. K., 221
- Weiland, G. A., *see* Stafford, G. A., 758
- Weinshank, R. L., *see* Forray, C., 703
- Weinshilbom, R. M., *see* Girard, B., 461
- Weinstein, H., *see* Zhou, W., 165
- Weiss, D. S., *see* Amin, J., 317
- Wells, J. N., *see* Piersen, C. E., 861, 871
- Werth, J. L., Zhou, B., Nutter, L. M., and Thayer, S. A. 2',3'-Dideoxycytidine alters calcium buffering in cultured dorsal root ganglion neurons, 1119
- Wess, J., *see* Pittel, Z., 61
- Westbrook, G. L., *see* Saugstad, J. A., 367
- Wetzel, J. M., *see* Forray, C., 703
- Whaley, B. S., Yuan, N., Birnbaumer, L., Clark, R. B., and Barber, R. Differential expression of the β -adrenergic receptor modifies agonist stimulation of adenylyl cyclase: A quantitative evaluation, 481
- Whiting, P. J., *see* Quirk, K., 1061
- Widmann, C., Bürki, E., Dolci, W., and Thorens, B. Signal transduction by the cloned glucagon-like peptide-1 receptor: Comparison with signaling by the endogenous receptors of β cell lines, 1029
- Wieland, T., *see* Offermanns, S., 890
- Wilcox, B. D., *see* Du, Y.-L., 1125
- Wilcox, H. M., *see* Saporito, M. S., 395
- Wilkinson, G. F., Purkiss, J. R., and Boarder, M. R. Differential heterologous and homologous desensitization of two receptors for ATP (P_{2Y} purinoceptors and nucleotide receptors) coexisting on endothelial cells, 731
- Williams, K., *see* Zhong, J., 846
- Williams, K., Zappia, A. M., Pritchett, D. B., Shen, Y. M., and Molinoff, P. B. Sensitivity of the *N*-methyl-D-aspartate receptor to polyamines is controlled by NR2 subunits, 803
- Wilson, J. M., *see* Pristupa, Z. B., 125
- Wilson, S. P., *see* Cannon, S. D., 109
- Woo, E. S., *see* Yang, Y.-Y., 453
- Wood, T. C., *see* Girard, B., 461
- Worland, P. J., *see* Seynaeve, C. M., 1207
- Wright, J. E., *see* Rhee, M. S., 783
- Wright, S., *see* Simmons, L. K., 373
- Wroblewski, J. T., *see* Kiedrowski, L., 1050
- Wu, C., *see* Masood, K., 324
- Wu, G., Tonner, P. H., and Miller, K. W. Ethanol stabilizes the open channel state of the *torpedo* nicotinic acetylcholine receptor, 102
- X**
- Xu, C., *see* Neuhaus-Steinmetz, U., 36
- Y**
- Yalowich, J. C., *see* Fornari, F. A., 649
- Yamada, H., *see* Kumagai, Y., 359
- Yamada, K., *see* Tanaka, T., 724
- Yang, S.-Z., *see* Wade, S. M., 1191
- Yang, Y.-Y., Woo, E. S., Reese, C. E., Bahnson, R. R., Saijo, N., and Lazo, J. S. Human metallothionein isoform gene expression in cisplatin-sensitive and resistant cells, 453
- Yang-Feng, T. L., *see* Kim, K.-M., 608
- Yano, H., Philipson, L. H., Kugler, J. L., Tokuyama, Y., Davis, E. M., Le Beau, M. M., Nelson, D. J., Bell, G. I., and Takeda, J. Alternative splicing of human inwardly rectifying K^+ channel ROMK1 mRNA, 854
- Yasuda, K., *see* Law, S. F., 587
- Yasuda, K., *see* Raynor, K., 330
- Yeh, Y., *see* Prochaska, H. J., 916
- Yergey, J., *see* O'Neill, G. P., 245
- Yokoi, T., *see* Sakuma, T., 228
- Yoshimura, H., *see* Kamagia, Y., 359
- Young, A. B., *see* Catania, M. V., 626
- Yu, H., *see* Huang, R.-R. C., 690
- Yu, L., *see* Raynor, K., 330
- Yuan, N., *see* Whaley, B. S., 481
- Z**
- Zable, A. C., *see* Liu, G., 189
- Zaina, S., *see* Law, S. F., 587

- Zappia, A. M., *see* Williams, K., 803
- Zea-Ponce, Y., *see* Scanley, B. E., 136
- Zhang, L.-J., Lachowicz, J. E., and Sibley, D. R. The D_{2S} and D_{2L} dopamine receptor isoforms are differentially regulated in Chinese hamster ovary cells, 878
- Zhao, T.-J., Chiu, T. H., and Rosenberg, H. C. Reduced expression of γ -aminobutyric acid type A/benzodiazepine receptor γ 2 and α 5 subunit mRNAs in brain regions of flurazepam-treated rats, 657
- Zhong, J., Russell, S. L., Pritchett, D. B., Molinoff, P. B., and Williams, K. Expression of mRNAs encoding subunits of the *N*-methyl-D-aspartate receptor in cultured cortical neurons, 846
- Zhou, B., *see* Werth, J. L., 1119
- Zhou, W., Flanagan, C., Ballesteros, J. A., Konvicka, K., Davidson, J. S., Weinstein, H., Millar, R. P., and Sealfon, S. C. A reciprocal mutation supports helix 2 and helix 7 proximity in the gonadotropin-releasing hormone receptor, 165
- Zhu, S.-J., and Toews, M. L. Intact cell binding properties of cells expressing altered β -Adrenergic receptors, 255
- Zhu, S. Z., Wang, S. Z., Hu, J., and El-Fakahany, E. E. An arginine residue conserved in most G protein-coupled receptors is essential for the function of the m1 muscarinic receptor, 517
- Zingel, V., *see* Seifert, R., 578
- Zoghbi, S., *see* Scanley, B. E., 136
- zu Heringdorf, D. M., *see* Scheiner-Bobis, G., 1132
- Zunino, F., *see* Capranico, G., 908

**Copyright © 1994 by the American Society for
Pharmacology and Experimental Therapeutics**

Newsworthy and timely
articles in your field

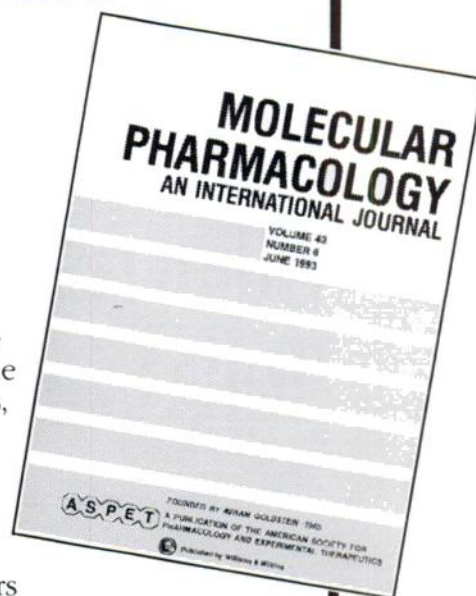
MOLECULAR PHARMACOLOGY

Editor: **T. Kendall Harden, PhD**, University of North Carolina
School of Medicine, Chapel Hill, North Carolina

Is your special interest receptors and neurotransmitters... drug
metabolism... antibiotic and anticancer drug actions... or other
areas related to the molecular basis of drug action? If so, you
should be subscribing to **MOLECULAR PHARMACOLOGY**.

The editor's and editorial board's high standards ensure that the
papers you read in **MOLECULAR PHARMACOLOGY** are on the
cutting edge of research on drug action and selective toxicity at the
molecular level. Original applications of biochemistry, biophysics,
genetics, and molecular biology are juxtaposed with innovative
pharmacologic research to elucidate basic problems in pharma-
cology and toxicology, including such areas as molecular mecha-
nisms involved in drug receptor-effector coupling, xenobiotic
metabolism, and antibiotic and anticancer drug action. Start your
subscription today to ensure access to the most newsworthy papers
in your field. **Monthly**

Call toll-free to start your subscription immediately, **1-800-638-6423**
from anywhere in the U.S. or Canada.



YES! Enter my subscription:

Avoid future rate increases and ensure uninterrupted service—enter
your multiyear subscription today!

Molecular Pharmacology (monthly)

☐ Individual: \$105/yr ☐ Institutions: \$230/yr
(Please add \$30.00 outside the U.S.; in Canada, also add 7% GST.)
☐ New Subscription ☐ Renewal ☐ 3 yrs ☐ 2 yrs ☐ 1 yr

name _____

address _____

city state zip _____

Williams & Wilkins
A WAVERLY COMPANY

MOL 55049

P.O. Box 23291
Baltimore, Maryland 21203-9990

Printed in USA

Payment options:

☐ Check enclosed ☐ Bill me
☐ VISA ☐ MasterCard ☐ American Express

card # _____

signature / P.O.# _____

MD and PA subscribers must add state sales tax. Subscriptions from outside the US
and Canada must be prepaid, in US dollars only. In Japan, contact Igaku-Shoin
MYW, Ltd. (03) 5689-5400. Rates valid for orders received through October 31,
1994.

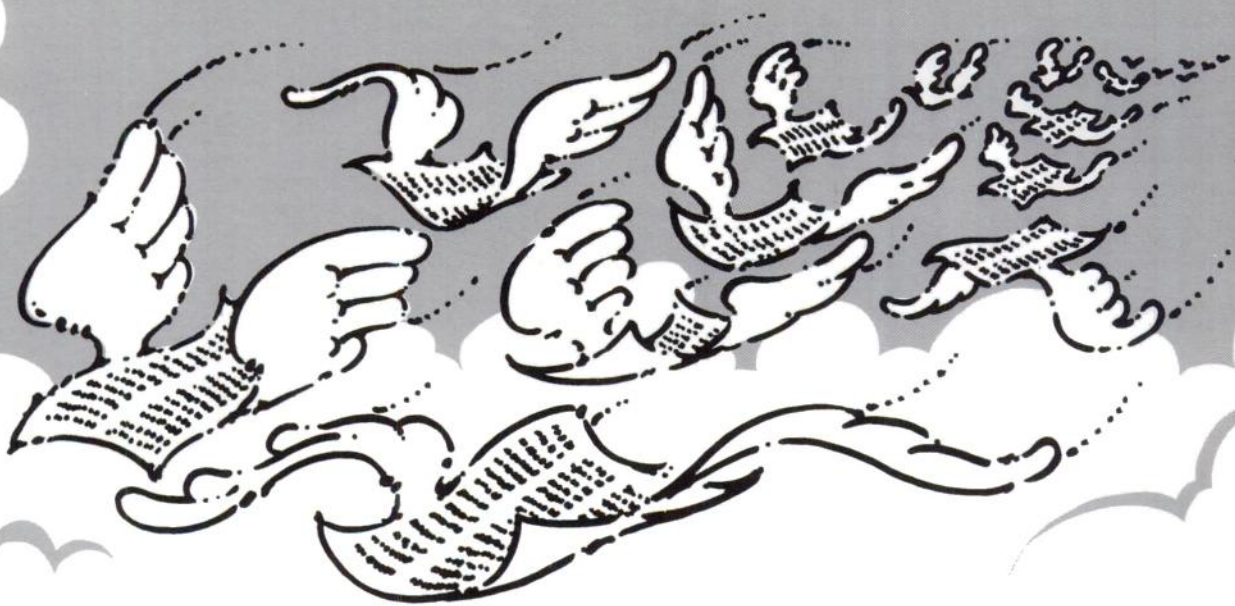
Please allow 8 weeks for delivery of your first issue. Surface mail delivery to
countries outside the US may take up to 16 weeks. Airmail rates available upon
request.

Discounts available to members on all ASPET publications. SAVE 10% when
ordering two. SAVE 15% when ordering three. SAVE 20% when ordering all four.

Broadway House
2-6 Fulham Broadway
London SW6 1AA England

J4049S ZMOL





Williams & Wilkins Quick Copies. Tell us today. Read it tomorrow.

You can get copies of any article published in any Williams & Wilkins journal. It's fast – because we're the primary source, we can fax an article to you within **24 hours** of when we receive your request. It costs less – there are **no copyright fees** and the **cost of faxing is included in the price**. It's affordable – look at the table to the right.

Williams & Wilkins Quick Copies. Tell us today.
Read it tomorrow.

RATES, PER ARTICLE

1–5	pages	\$10
6–10	pages	\$12
11–15	pages	\$15
16–20	pages	\$18
21–25	pages	\$20
26+	pages	\$25

(\$20, Federal Express)

Call toll-free from the U.S. or Canada to 1-800-354-9685, or fax this form to 1-410-528-4312, or mail to the address on the order form.



Williams & Wilkins
A WAVERLY COMPANY

ORDER FORM

PLEASE SEND ME THIS ARTICLE:

Journal Title _____
Volume/Issue/Year _____
Beginning/Ending Page # _____ Number of copies _____
Author _____
Article Title _____

DELIVERY:

☐ Fax ☐ First class mail
☐ Air mail ☐ Federal Express

Fax, phone, or mail your citation to:

Williams & Wilkins / Quick Copies
428 E. Preston Street / Baltimore, MD 21202-3993
Call 1-800-354-9685 (toll free) / Fax 1-410-528-4312

PAYMENT:

☐ Check enclosed (to Williams & Wilkins)
☐ Charge VISA ☐ Charge MasterCard
Acct. # _____ Exp. Date _____

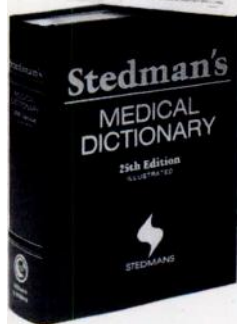
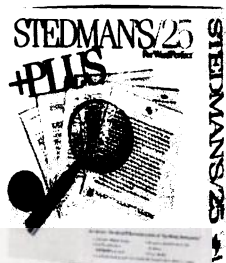
Signature _____

SHIP TO:

Name _____
Department _____
Institution _____
Address _____
City/State/Zip _____
Country _____
Telephone # _____ Fax # _____

Previous Editors

- 1965** Avram Goldstein, *Editor*. Stanford University.
1968 Paul Talalay, *Editor*; Donald S. Coffey, *Associate Editor*. Johns Hopkins University.
1971 Steven E. Mayer, *Editor*, Palmer W. Taylor, *Associate Editor*. University of California at San Diego.
1975 George I. Drummond, *Editor*; H. Joseph Goren, *Associate Editor*. University of Calgary.
1978 Norman Kirschner, *Editor*; Theodore A. Slotkin, *Associate Editor*. Duke University.
1983 Joel G. Hardman, *Editor*; Lee Limbird, F. Peter Guengerich, *Associate Editors*. Vanderbilt University.
1986 William A. Catterall, *Editor*; Joseph A. Beavo, Mont R. Juchau, Neil M. Nathanson, Daniel R. Storm, Frank F. Vincenzi, *Associate Editors*. University of Washington, Seattle.



STEDMAN'S & STEDMAN'S

Partners in Kind

Easy access format and the exclusive Subentry Locator!

Stedman's Medical Dictionary, 25th Ed.

Stedman's/25 has an *index-like, single-entry format in two columns of large, sharp print* for quick scanning of the alphabetized entries. Plus the unique "dictionary within a dictionary"—the Stedman's Subentry Locator—for locating elusive multi-word (subentry) terms, as spoken or written, by their modifying words. What's more, only Stedman's/25 includes:

- over 100,000 current terms
- 1,920 information-packed pages in an 8" x 10" format
- concise definitions with simplified phonetic spelling

1990/#7916-6/\$43.00

The ultimate medical/pharmaceutical spellchecker available for WordPerfect and now Microsoft Word—with 200,000 words!

STEDMAN'S/25 PLUS FOR WORDPERFECT and MS WORD

STEDMAN'S/25 PLUS is your single source for medical/pharmaceutical spell checking with WordPerfect and Microsoft Word. Containing all the medical spell checking power of the popular STEDMAN'S/25, it includes 30,000 industry-standard trade and generic drug names.

WordPerfect—Single-User Version

- IBM version for 5.0 or later (#17556-4) \$99.00
(also works under Windows 3.x)
- MAC version for 2.02 (#17562-9) \$99.00

MS Word for Windows 2.0/above and MacWord 5.0/above (#17611-0)

\$99.00

Starter Kit for up to 5 Users

- IBM/Windows (#17577-7) \$345
- MAC (#17582-3) \$345
- MS Word (Windows/Mac) (#17612-9) \$345



Order Toll-Free:

Call 1-800-527-5597 or Fax 1-800-447-8438 from anywhere in the US or Canada!



STEDMAN'S
The Best Words in Medicine



Williams & Wilkins
428 East Preston Street
Baltimore, MD 21202-3993

Leading Pharmacology Journals

Publications of the American Society for Pharmacology and Experimental Therapeutics, Inc.

The Journal of Pharmacology and Experimental Therapeutics

Editor: John A. Harvey, Ph.D.

JPET is respected the world over as one of the leading research journals in the field of pharmacology. You'll find broad coverage of all aspects of the interactions of chemicals with biological systems, including autonomic, behavioral, cardiovascular, cellular, clinical, developmental, gastrointestinal, immuno-, neuro-, pulmonary, and renal pharmacology, as well as analgesics, drug abuse, metabolism and disposition, chemotherapy, and toxicology. *Monthly*.

Drug Metabolism and Disposition: the biological fate of chemicals

Editor: Raymond F. Novak, Ph.D.

Drug Metabolism and Disposition publishes experimental results from *in vitro* and *in vivo* systems that bring you significant and original information on metabolism and disposition of endogenous and exogenous compounds, including pharmacologic agents and environmental chemicals. The areas covered are: xenobiotic metabolism, expression of drug metabolizing enzymes, regulation of drug metabolizing enzyme gene expression, pharmacokinetics, pharmacodynamics and toxicological consequences of xenobiotic metabolism. *Bimonthly*.

Pharmacological Reviews

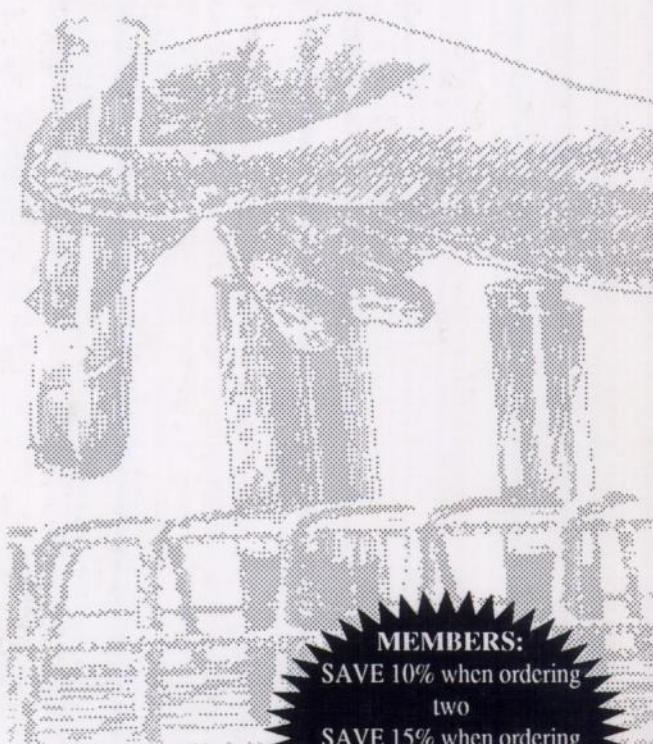
Editor: Robert E. Stitzel, Ph.D.

Pharmacological Reviews is a showcase for important review articles in your field, featuring longer papers on topics of high current interest. The areas covered in review papers have included biochemical and cellular pharmacology, drug metabolism and disposition, renal pharmacology, neuropharmacology, behavioral pharmacology, clinical pharmacology, and toxicology. No library serving the pharmacologic community should be without a subscription. *Quarterly*.

Molecular Pharmacology

Editor: T. Kendall Harden, Ph.D.

The papers published in Molecular Pharmacology are on the cutting edge of research on drug action and selective toxicity at the molecular level. Original applications of biochemistry, biophysics, genetics, and molecular biology are juxtaposed with innovative pharmacologic research to elucidate basic problems in pharmacology and toxicology, including such areas as molecular mechanisms involved in drug receptor-effector coupling, xenobiotic metabolism, and antibiotic and anticancer drug action. *Monthly*



MEMBERS:

SAVE 10% when ordering two

SAVE 15% when ordering three

SAVE 20% when ordering four



Please enter my subscription to the following:

The Journal of Pharmacology and Experimental Therapeutics (*monthly*)

☐ Individual \$190/year ☐ Institutional \$340/year (Add \$65/year for subscriptions outside the U.S.; in Canada, also add 7% GST.)

☐ New Subscription ☐ Renewal

Subscribe for: ☐ 3 years ☐ 2 years ☐ 1 year

Drug Metabolism and Disposition (*bimonthly*)

☐ Individual \$85/year ☐ Institutional \$140/year (Add \$20/year for subscriptions outside the U.S.; in Canada, also add 7% GST.)

☐ New Subscription ☐ Renewal

Subscribe for: ☐ 3 years ☐ 2 years ☐ 1 year

Molecular Pharmacology (*monthly*)

☐ Individual \$105/year ☐ Institutional \$230/year (Add \$30/year for subscriptions outside the U.S.; in Canada, also add 7% GST.)

☐ New Subscription ☐ Renewal

Subscribe for: ☐ 3 years ☐ 2 years ☐ 1 year

Pharmacological Reviews (*quarterly*)

☐ Individual \$60/year ☐ Institutional \$107/year ☐ In-training * \$45/year (Add \$15/year for subscriptions outside the U.S.; in Canada, also add 7% GST.)

☐ New Subscription ☐ Renewal

Subscribe for: ☐ 3 years ☐ 2 years ☐ 1 year

PTT 55393

Payment Options:

☐ Check enclosed (payable to Williams & Wilkins)

☐ Bill me ☐ American Express

☐ MasterCard ☐ VISA Card # _____

Exp. date _____ Signature or P.O. # _____

Name _____

Address _____

City/State/Zip _____

* Please indicate institution/status _____

MD and PA subscribers must add state sales tax. Subscriptions outside the U.S. must be prepaid in U.S. dollars. In Japan, contact Igaku-Shoin, MYW, Ltd. (03) 5689-5400. Rates valid through October 31, 1994.

Return coupon to:
Williams & Wilkins
A WAVERLY COMPANY

P.O. Box 23291, Baltimore, MD 21203-9990

For credit card orders, call TOLL FREE:
1-800-638-6423 in the U.S. or Canada.

J4225S ZPTT