

SUBJECT INDEX FOR VOLUME 47

A

- ACEA-1021 and -1031, pharmacology of (rat), 568
 Acetylcholine receptor, nicotinic, *see* Nicotinic acetylcholine receptor
 Acetylcholine receptor, neuronal, α -bungarotoxin binding by (chick), 717
 Acetyl-11-keto- β -boswellic acid, 5-lipoxygenase inhibition by (rat), 1212
 Adamantane derivatives, pharmacology of (mouse), 558
 Adenophostin A, myo-inositol-1,4,5-trisphosphate receptor interaction with, 1204
 Adenosine receptor
 affinity states of, I-APE characterization of (rat), 307
 antigenic peptide antibodies to (human), 1126
 intestinal muscle phospholipase C regulation by (rabbit), 1172
 Adenosine triphosphate, adenylyl cyclase and phospholipase C stimulation by (NG108-15 cells), 855
 Adenosine triphosphate-sensitive potassium channel
 glibenclamide and (*Xenopus*), 588
 mastoparan and (rat), 787
 Adenylyl cyclase
 extracellular ATP stimulation of (NG108-15 cells), 855
 μ -opioid receptor modulation of (rat), 1041
 type II, formyl peptide-mediated stimulation of (human), 835
 Adipose tissue, glucose transport in, tetrachlorodibenzo-*p*-dioxin and (mouse), 65
 Adrenal medulla, chromaffin cell in, striatal dopamine receptor in (rat), 40
 α_{1d} -Adrenergic receptor, cloned subtypes of, in SK-N-MC cells (human), 977
 β_2 -Adrenergic receptor, resensitization of (human), 666
 β -Adrenoceptor- $G_{\alpha s}$ coupling, in aorta, age and (rat), 772
 Aging, aorta β -adrenoceptor- $G_{\alpha s}$ coupling and (rat), 772
 Airway
 muscarinic cholinergic receptors in, atropine and (rabbit), 485
 naphthalene metabolism in (hamster, mouse, rat), 74
 Alkanol inhibitory site, on nicotinic acetylcholine receptor (*Torpedo*), 121
 Amiloride, epithelial sodium channel binding sites for (human), 1133
 γ -Aminobutyric acid receptor
 alkyl-substituted γ -butyrolactones and (rat), 1217
 anesthetics and pentobarbital and (frog, human), 213, 363
 brain, selective actions of (rat), 354
 carbamazepine and phenytoin modulation of (human, rat), 1189
 cerebellar, furosemide as antagonist for (rat), 283
 heterologous uncoupling at, neurosteroids and (mouse), 603
 zinc antagonism of (*Xenopus*), 595
 α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor
 benzodiazepine inhibition at (rat), 582
 mutation of (human), 148
 Aminopyrimidopyrimidine, 5-phosphoribosyl-1-pyrophosphate synthetase inhibition by (human), 810
 Amiodarone, pertussis toxin-sensitive G protein activation by (human), 234
 AMPA receptor, *see* α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor
 Amphetamine, dopamine-releasing actions of (human), 368
 Amphetamine specificity, of biogenic amine transporters (human and rat), 544

- β -Amyloid peptide, apoptosis induced by, glutamate receptors and (mouse), 890
 Anabaseine compound, as $\alpha 7$ nicotinic agonist (frog), 164
 Androgen-binding protein, hepatic (dog), 1080
 Anesthetics, GABA receptors and (frog, human), 213, 363
 Angiotensin receptor antagonists
 SC-54629, insurmountable nature of (rat), 115
 SKF-108,566, binding of, residues for (rat), 425
 Anticonvulsant, adanamtane derivatives as (mouse), 558
 Antidepressant
 hypothalamic hydroxytryptamine receptor and (rat), 99
 inhibition of, by cAMP response element-binding protein (human), 1112
 Aorta
 β -adrenoceptor- $G_{\alpha s}$ coupling in, age and (rat), 772
 endothelial cells of, cytochrome P4501A1 in (pig), 296
 Apoptosis
 β -amyloid peptide-induced, glutamate receptors and (mouse), 890
 cerebellar neuronal, muscarinic cholinergic receptor blockade of (rat), 248
 drug-induced, chromatin fragmentation in (human), 986
 nitric oxide-induced, protein kinases and (mouse), 757
 of prostate cancer cell, paclitaxel (Taxol) and (human), 1106
 Arginine, transmembrane, in thyrotropin-releasing hormone receptor (mouse), 480
 Aryl hydrocarbon receptor complex, orientation of (mouse), 432
 Atropine, airway muscarinic cholinergic receptors and (rabbit), 485
 Azide derivatives, of ethidium bromide, nicotinic acetylcholine receptor labeling by (*Torpedo*), 1

B

- Baculovirus, endothelial nitric oxide synthase in (insect), 655
 Bay-region carcinogens, B-DNA stereoselectivity for, 624
 BCNU (*N,N'*-Bis(2-chloroethyl)-*N*-nitrosourea), transcription termination by (*Thermus aquaticus*), 290
 Benzodiazepine, inhibition of, at AMPA and kainate receptors (rat), 582
 Bile, free radical adducts in, intragastric alcohol and (rat), 1028
 Bilirubin glucuronidation, liver UDP-glucuronosyltransferase and (rat), 1101
 Binding curve interpretation, with high receptor concentration, 1197
 Biogenic amine transporter, amphetamine specificity of (human and rat), 544
 N,N' -Bis(2-chloroethyl)-*N*-nitrosourea, transcription termination by (*Thermus aquaticus*), 290
 Bisphosphonate, heterocycle-containing, bone resorption and (amoe-
 ba), 398
 Bombesin analog, gastrin-releasing peptide receptor activation by (mouse), 871
 Bombesin receptor, cloned (human), 10
 Bone resorption, heterocycle-containing bisphosphonate and (amoe-
 ba), 398
 Bradykinin receptors, in pulmonary artery endothelial cells (bovine), 525
 Brain, *see also* Cerebellar entries; Cerebellum
 cytochrome P450 in (rat), 1148
 GABA receptor in, pregnanediol at (rat), 354
 glucose transport in, tetrachlorodibenzo-*p*-dioxin and (mouse), 65
 μ -opioid receptor in (mouse), 738

- tau phosphorylation in (human), 745
- Bromoacetylflavone, quinone reductase inactivation by (rat), 429
- Bromovinyldeoxyuridine, herpes simplex virus thymidine kinase inhibition by, 1231
- α -Bungarotoxin binding, by neuronal acetylcholine receptor (chick), 717
- γ -Butyrolactone, alkyl-substituted, GABA receptor and (rat), 1217

C

- C5a receptor activation, G protein regions and (human), 218
- Calcitonin, bioactivity of, at cloned receptors (human, pig, and rat), 798
- Calcium, dopamine receptor-mediated release of, in 293 cell (human), 131
- Calcium buffering, mitochondrial, excitotoxicity and (rat), 140
- Calcium channel
 - β_2 subunit of, cloning and expression of (mouse), 707
 - diocanoylglycerol block of, in myometrial cell (rat), 842
 - ethanol inhibition of, G protein and (rat), 997
 - μ -opioid receptor modulation of (rat), 1041
 - peptide antagonist of, glutamate release and (rat), 348
 - ryanodine receptor-like, in nonexcitable cells (human), 21
 - influx of
 - chlorine channel blockers and, in mast cell (rat), 1014
 - fenaminate inhibition of, in polymorphonuclear leukocytes (human), 1006
- Calcium signaling, in neuroblastoma cell, desensitization of (human), 509
- Camptothecin, topoisomerase and protein-linked DNA breaks induced by (KB cells), 907
- Carbachol, insulin release and (rat), 863
- Carbamazepine, GABA receptor modulation by (human, rat), 1189
- Carcinogens, bay-region, B-DNA stereoselectivity for, 624
- Cardiac myocyte, β_2 -adrenoceptor coupling to pertussis toxin-sensitive myocyte in (rat), 322
- Central nervous system, proto-oncogene expression in, oxotremorine induction of (mouse), 272
- Ceramide-1-phosphates, DNA synthesis and (rat), 883
- Cerebellum
 - GABA receptor in, furosemide as antagonist for (rat), 283
 - granule cell in, NMDA receptors in, nitric oxide blockade of (mouse), 1239
 - neuron apoptosis in, muscarinic cholinergic receptor blockade of (rat), 248
- Chlorine channel blockers, calcium influx and, in mast cell (rat), 1014
- Cholinergic(s), potassium current inhibition by (guinea pig), 1248
- Chromaffin cell, striatal dopamine receptor in (bovine), 40
- Chromatin, fragmentation of, in drug-induced apoptosis (human), 986
- Chromium, hepatoma tyrosine phosphorylation and (rat), 686
- Cisplatin, cytotoxicity of, fludarabine and, DNA repair and (human), 1072
- Clara cell, cytotoxicity of, cytochrome P450 and (hamster, mouse, rat), 74
- Clofilium, Kv1.5 delayed rectifier potassium channel block by (human), 198
- Cocaine, dopamine-releasing actions of (human), 368
- Copper/zinc superoxide dismutase, neuron death and, after nerve growth factor withdrawal (rat), 1095
- Cyclic AMP, and calcium-activated potassium current, hippocampal, hydroxytryptamine receptor regulation of (rat), 191
- Cyclic AMP response element-binding protein
 - antidepressant inhibition by (human), 1112
 - pineal, phosphorylation of (rat), 439
- Cyclic GMP, in vasoactive intestinal peptide elevation of pinealocyte calcium, 923

- Cyclic GMP analogs, phosphodiesterase specificity for (bovine), 330, 340
- CYP1A2* gene, regulation of (human), 677
- Cytochrome P450
 - brain (rat), 1148
 - Clara cell cytotoxicity and (hamster, mouse, rat), 74
 - hepatic, lansoprazole metabolism by (human), 410
 - in hepatoma, insulin and (rat), 474
 - opiate regulation of (rat), 57
- Cytochrome P4501A1, in aorta endothelial cells (pig), 296
- Cytochrome P4502C11, cytokine suppression of, in hepatocytes (rat), 940
- Cytokine, cytochrome P4502C11 suppression by, in hepatocytes (rat), 940

D

- 12-Deoxyphorbol-13-phenylacetate, protein kinase C regulation by (mouse), 258
- Deoxyribonucleic acid
 - protein-linked breaks in, camptothecin-induced (KB cells), 907
 - repair of, fludarabine suppression of (human), 1072
 - stereoselectivity of, for bay-region carcinogens, 624
 - synthesis of, ceramide-1-phosphate and (rat), 883
- 21-Deoxysteroids, sodium-retaining activity of (rat), 535
- Diacylpiperazine antagonists, of neurokinin-1 receptor (human), 660
- Diocanoylglycerol block, of calcium channel, in myometrial cell (rat), 842
- Docosahexaenoic acid, potassium channel block by (rat), 381
- Dolastatin 10, interaction of, with tubulin (bovine), 965
- Dopamine receptor
 - calcium release and, in 293 cell (human), 131
 - striatal, in chromaffin cell (bovine), 40
- Dopamine-releasing action, of amphetamine and cocaine (human), 368
- Dopamine transporter
 - 3β -(4-¹²⁵I-iodophenyl)tropane-2 β -carboxylic acid isopropyl ester labeling of (rat), 779
 - photoaffinity binding domains on (rat), 956
- Drug resistance, multiple, *see* Multiple drug resistance

E

- EGTA, phospholipase C inhibition by (human), 823
- Endothelial cell
 - in aorta, cytochrome P4501A1 in (pig), 296
 - in pulmonary artery, bradykinin receptors in (bovine), 525
- Endothelial nitric oxide synthase, recombinant, post-translational modifications of (insect), 655
- Endothelin receptor
 - mesangial, thrombin regulation of (rat), 1156
 - in osteosarcoma cell, vitamin D regulation of (rat), 266
 - prostatic, contraction mediation by (human), 730
- Epithelial sodium channel, amiloride binding sites on (human), 1133
- Ergot, binding of, to 5-hydroxytryptamine_{2A} receptors, 450
- Esterase, stereoselective activity of, toward ketoprofen glucuronide (human), 647
- Ethanol
 - calcium channel inhibition by, G protein and (rat), 997
 - metabolism of, detection of (rat), 1224
- Ethidium bromide, azide derivatives of, nicotinic acetylcholine receptor labeling by (*Torpedo*), 1
- Etoposide, apoptosis induced by, chromatin fragmentation in (human), 986

F

- Fenamates, calcium influx and, in polymorphonuclear leukocytes (human), 1006

Fibrosarcoma cell, suramin-resistant, in lung, topoisomerase activities in (hamster), 898
 Fludarabine, cisplatin cytotoxicity and, DNA repair and (human), 1072
 Formyl peptide-mediated stimulation, of type II adenylyl cyclase (human), 835
 Free radical adducts, in bile, intragastric alcohol and (rat), 1028
 Furosemide, as antagonist for cerebellar GABA receptor (rat), 283

G

GABA receptor, *see* γ -Aminobutyric acid receptor
 Gastrin-releasing peptide receptor, bombesin analog activation of (mouse), 871
 Glibenclamide, ATP-sensitive potassium channels and (*Xenopus*), 588
 Glucose transport, in adipose tissue and brain, tetrachlorodibenzo-*p*-dioxin and (mouse), 65
 Glutamate, release of, peptide calcium channel antagonists and (rat), 348
 Glutamate receptors
 β -amyloid peptide-induced apoptosis and (mouse), 890
 metabotropic, in mesencephalon (mouse), 1057
 Glycine binding site, on NR1 subunit, of NMDA (human), 374
 G protein
 and κ -opioid receptor activation of potassium channel (*Xenopus*), 1035
 C5a receptor activation and (human), 218
 calcium channel modulation by (rat), 997
 -coupled receptor kinase, muscarinic receptor phosphorylation and (human), 224
 pertussis toxin-sensitive
 β_2 -adrenoceptor coupling to, in cardiac myocyte (rat), 322
 amiodarone activation of (human), 234
 [35 S]GTP γ S, binding of, to neuroblastoma, μ -opioid agonist and (human), 848
 Guanosine triphosphate, depletion of, primer RNA and (human), 948

H

Halothane, GABA receptors and (human), 363
 Heart, potassium current in, terfenadine blockade of (human), 181
 Hepatocyte
 cytochrome P450C11 suppression in, by cytokines (rat), 940
 propyl gallate in, metabolism and cytotoxicity of (rat), 1021
 Hepatoma
 cytochrome P450 expression in, insulin and (rat), 474
 tyrosine phosphorylation in, chromium and (rat), 686
 Herpes simplex virus, acyclic nucleoside phosphonate antiviral activity and (human), 816
 Herpes simplex virus thymidine kinase, iododeoxyuridine and bromovinyldeoxyuridine inhibition of (human), 1231
 Hippocampus, hydroxytryptamine receptor in, potassium current in, cAMP and protein kinase A and (rat), 191
 HL-60 cell, topoisomerase II α promoter in, *trans*-activation of (human), 696
 HPMPA and HPMPA, metabolic and antiviral activities of (human), 816
 2-Hydroxyethyl- α -D-glucopyranoside-2,3',4'-triphosphate, *myo*-inositol-1,4,5-trisphosphate receptor interaction with, 1204
 Hydroxytryptamine receptors
 hippocampal, potassium current in, cAMP and protein kinase A and (rat), 191
 hypothalamic, antidepressants and (rat), 99
 5-Hydroxytryptamine₂ receptors, *cis* element regulation of (rat), 915
 5-Hydroxytryptamine_{2A} receptors, ergot binding to, 450
 5-Hydroxytryptamine_{2B} receptors, in serotonergic cell line (mouse), 458

5-Hydroxytryptamine₃ receptors, morphine and (*Xenopus*), 491
 Hypothalamus, hydroxytryptamine receptors in, antidepressants and (rat), 99

I

I-APE ((iodophenyl)ethylaminoadenosine), to characterize adenosine receptor affinity states (rat), 307
 Insulin
 cytochrome P450 expression and (rat), 474
 release of, carbachol and (rat), 863
 Interleukin(s), cytochrome P450C11 suppression by, in hepatocytes (rat), 940
 Interleukin 1 α , ovarian cancer cell DNA repair and (human), 1255
 Interleukin 2 analog, biological response of (human), 206
 Intestinal muscle, phospholipase C in, adenosine receptor regulation of (rabbit), 1172
 Iododeoxyuridine, herpes simplex virus thymidine kinase inhibition by, 1231
 (Iodophenyl)ethylaminoadenosine, to characterize adenosine receptor affinity states (rat), 307
 3 β -(4- 125 I-iodophenyl)tropane-2 β -carboxylic acid isopropyl ester, dopamine transporter labeling by (rat), 779
 Iron(III) chelator, as antimalarial (human), 403
 Isoflurane, GABA receptors and (human), 363

K

Kainate receptor, benzodiazepine inhibition at (rat), 582
 Ketoprofen glucuronide, serum albumin esterase stereoselective activity toward (human), 647
 Kidney membrane, U-37883 receptor binding in (pig), 155
 Kupffer cells, free radical adducts and, in bile (rat), 1028

L

Lansoprazole, hepatic metabolism of (human), 410
 Lead, permeation of, through myelin lipid liposomes (bovine), 766
 Leukemia cell, topoisomerase II α promoter in, *trans*-activation of (human), 696
 Leukocyte, polymorphonuclear, calcium influx in, fenaminate inhibition of (human), 1006
 Ligand-gated channel, adanamtane derivative blockade of (mouse), 558
 Liposomes, myelin lipid, lead permeation through (bovine), 766
 5-Lipoxygenase, acetyl-11-keto- β -boswellic acid inhibition of (rat), 1212
 Liver
 androgen-binding protein in (dog), 1080
 lansoprazole metabolism in (human), 410
 UDP-glucuronosyltransferase in, opioid and bilirubin glucuronidation and (rat), 1101
 Lung
 fibrosarcoma cell in, suramin-resistant, topoisomerase activities in (hamster), 898
 secretin receptor in, cloning and expression of (human), 467
 Lymphoid cell, apoptotic, chromatin fragmentation in (human), 996

M

Malaria, iron(III) chelators and (human), 403
 Mast cell, calcium influx in, chlorine channel blockers and (rat), 1014
 Mastoparan, ATP-sensitive potassium channel and (rat), 787
 Mercaptopurine, thiopurine *S*-methyltransferase methylation of (human), 1141
 Mesangial cell, endothelin receptor in, thrombin regulation of (rat), 1156
 Mesencephalon, metabotropic glutamate receptors in (mouse), 1057

- Mitochondria, calcium buffering in, excitotoxicity and (rat), 140
 Mizoribine, antitumor and immunosuppressive effects of (human), 948
 Morphine
 cytochrome P450 regulation by (rat), 57
 5-hydroxytryptamine₃ receptors and (*Xenopus*), 491
 withdrawal of, multiple activator protein-1 signaling pathways and, in brain (rat), 29
 Multiple activator protein-1 signaling pathways, in brain, morphine withdrawal and (rat), 29
 Multiple drug resistance
 in leukemic cells, verapamil and (human), 51
 P-glycoprotein-mediated, welwitindolinone analog reversal of (human), 241
 Muscarinic cholinergic receptor
 activation of, cerebellar neuron apoptosis blocked by (rat), 248
 airway, atropine and (rabbit), 485
 G protein-coupled receptor kinase-mediated phosphorylation of (human), 224
 m1, allosteric site on, mutagenesis and (human), 88
 Muscle, intestinal, phospholipase C in, adenosine receptor regulation of (rabbit), 1172
 Mycophenolic acid, antitumor and immunosuppressive effects of (human), 948
 Myelin lipid liposomes, lead permeation through (bovine), 766
 Myo-inositol-1,4,5-trisphosphate receptor, adenophostin A interaction with, 1204
 Myometrial cell, dioctanoylglycerol block of calcium channel in (rat), 842
- ## N
- NAD(P)H:quinone acceptor oxidoreductase, drug activation by (human, mouse, and rat), 934
 Naphthalene metabolism, in airway (hamster, mouse, rat), 74
 Natriuretic peptide receptor A, species selectivity of (human, mouse, rat), 172
 Nerve growth factor withdrawal, neuron death and, copper/zinc superoxide dismutase and (rat), 1095
 Neuroblastoma cell
 [³⁵S]GTPγS binding to, μ-opioid agonist and (human), 848
 phosphoinositide and calcium signaling in, desensitization of (human), 509
 Neuroblastoma/glioma cell, ATP stimulation of adenylyl cyclase and phospholipase C in (NG108–15 cells), 855
 Neurokinin-1 receptor
 diacylpiperazine antagonists of (human), 660
 signal transduction of, glutamate 78 and (rat), 1065
 Neuron death, nerve growth factor withdrawal and, copper/zinc superoxide dismutase and (rat), 1095
 Neurosecretory cells, phospholipase C activity in, nitrogen oxide inhibition of (PC-12 cells), 517
 Neurosteroids, and heterologous uncoupling at GABA receptor (mouse), 603
 Neurotensin receptor, nonpeptide antagonist radioligand for (rat), 1050
 Neutrokinin receptor antagonist, species selectivity of (human, rat), 314
 Nicotinic acetylcholine receptor
 alkanol inhibitory site on (*Torpedo*), 121
 ethidium bromide azide derivative labeling by (*Torpedo*), 1
 Nitric oxide
 apoptosis induced by, protein kinases and (mouse), 757
 cerebellar NMDA receptor blockade by (mouse), 1239
 Nitric oxide synthase
 endothelial, recombinant, post-translational modifications of (insect), 655
 inhibitors of (rat), 831
 Nitrogen oxide, phospholipase C activity and, in neurosecretory cells (PC-12 cells), 517
 NMDA receptor, *see* N-Methyl-D-aspartate receptor
 N-methylformamide, apoptosis induced by, chromatin fragmentation in (human), 986
 N-Methyl-D-aspartate receptor
 activation of, phospholipase-requiring pathways and, 1119
 cerebellar, nitric oxide blockade of (mouse), 1239
 metabotropic glutamate receptor inhibition of, in mesencephalon (mouse), 1057
 NR1 subunit of, glycine binding site on (human), 374
 quinoxaline affinity for (rat), 568
 Nonexcitable cells, ryanodine receptor-like calcium channel in (human), 21
 Nor-binaltorphimine, binding epitopes for (rat), 1089
 Norepinephrine, pineal responses to, 923
 Nucleoside phosphonates, acyclic, metabolism and antiviral activities of (human), 816
- ## O
- Oligonucleotides, biodistribution and metabolism of (mouse), 636
 Opioid glucuronidation, liver UDP-glucuronosyltransferase and (rat), 1101
 κ-Opioid receptor
 antisense mapping of (mouse), 1180
 binding epitopes for (rat), 1089
 potassium channel and (*Xenopus*), 551, 1035
 μ-Opioid agonist, modulation of [³⁵S]GTPγS binding to neuroblastoma by (human), 848
 μ-Opioid receptor
 in brain (mouse), 738
 calcium channel and adenylyl cyclase modulation by (rat), 1041
 Osteosarcoma cell, endothelin receptor in, vitamin D regulation of (rat), 266
 Ovarian cancer cell, interleukin-1α and (human), 1255
 Oxotremorine, central nervous system proto-oncogene expression and (mouse), 272
- ## P
- Paclitaxel (Taxol), prostate cancer cell apoptosis and (human), 1106
 Pentobarbital, GABA receptors and (frog, human), 213
 Peptide calcium channel antagonist, glutamate release and (rat), 348
 Pertussis toxin
 G protein sensitive to
 β₂-adrenoceptor coupling to, in cardiac myocyte (rat), 322
 amiodarone activation of (human), 234
 Pethidine, cytochrome P450 regulation by (rat), 57
 P-glycoprotein-mediated multidrug resistance, welwitindolinone analog reversal of (human), 241
 Phenytoin, GABA receptor modulation by (human, rat), 1189
 Phosphodiesterase
 cGMP analog specificity for (bovine), 330, 340
 regulation of, in monocytic cell (human), 1164
 Phosphoinositide signaling, in neuroblastoma cell, desensitization of (human), 509
 Phospholipase C
 EGTA and ST271 inhibition of (human), 823
 extracellular ATP stimulation of (NG108–15 cells), 855
 in intestinal muscle, adenosine receptor regulation of (rabbit), 1172
 nitrogen oxide inhibition of, in neurosecretory cells (PC-12 cells), 517
 Phosphonylmethoxyethyl adenine, metabolic and antiviral activities of (human), 816
 T lymphoid cell resistant to (human), 391

5-Phosphoribosyl-1-pyrophosphate synthetase, aminopyrimidopyrimidine inhibition of (human), 810
 Photoaffinity binding domains, on dopamine transporter (rat), 956
 Pineal gland, cAMP response element-binding protein phosphorylation in (rat), 439
 Pinealocyte, intracellular calcium in, vasoactive intestinal peptide elevation of, cGMP and, 923
 PMEA, *see* Phosphonylmethoxyethyl adenine
 Polymorphonuclear leukocyte, calcium influx in, fenaminate inhibition of (human), 1006
 Potassium channel
 ATP-sensitive
 glibenclamide and (*Xenopus*), 588
 mastoparan and (rat), 787
 docosahexaenoic acid block of (rat), 381
 κ -opioid receptors and (*Xenopus*), 551, 1035
 Kv1.5 delayed rectifier, clofilium block of (human), 198
 Potassium current
 calcium-activated, hippocampal, hydroxytryptamine receptor regulation of, cAMP and protein kinase A and (rat), 191
 cardiac, terfenadine blockade of (human), 181
 cholinergic inhibition of (guinea pig), 1248
 Pregnanediol, at GABA receptor, in brain (rat), 354
 Progesterone receptor, nonsteroidal modulators of (human), 630
 Propofol, GABA receptors and (frog, human), 213
 Propyl gallate, metabolism and cytotoxicity of, in hepatocyte (rat), 1021
 Prostate cancer cell, apoptosis of, paclitaxel (Taxol) and (human), 1106
 Prostate gland, endothelin receptor in, contraction mediation by (human), 730
 Protein kinase A, and calcium-activated potassium current, hippocampal, hydroxytryptamine receptor regulation of (rat), 191
 Protein kinase C, 12-deoxyphorbol-13-phenylacetate regulation of (mouse), 258
 Protein kinases A and C, nitric oxide-induced apoptosis and (mouse), 757
 Protein-linked DNA breaks, camptothecin-induced (hamster), 907
 Pulmonary artery, endothelial cells in, bradykinin receptors in (bovine), 525
 Purinergic P₂ receptor, in promonocytic U-937 cell (human), 104

Q

Quinone reductase
 bromoacetylflavone inactivation of (rat), 429
 drug activation by (human, mouse, and rat), 934
 Quinoxaline-2,3-diones, pharmacology of (rat), 568

R

Receptor concentration, binding curve interpretation and, 1197
 Ribonucleic acid, DNA synthesis primed by, GTP depletion and (human), 948
 Rifamexil, structural relationships of, 611
 Ryanodine receptor-like calcium channel, in nonexcitable cells (human), 21

S

SC-54629, insurmountable nature of (rat), 115
 Secretin receptor, in lung, cloning and expression of (human), 467

SKF-108,566, histidine 256 and (rat), 425
 SK-N-MC cells, cloned α_{1A} -adrenergic receptor in (human), 977
 Sodium fluoride, stimulus-secretion coupling and (RINm5F cells), 496
 Sodium/potassium pump, $\alpha 2$ subunit of, adaptive supersensitivity of (guinea pig), 726
 Sodium-retaining activity, of 21-deoxysteroids (rat), 535
 Somatostatin receptor, subtype 5 of, somatostatin-14 affinity of (hamster), 82
 [³H]SR 48692, binding domains for, on neurotensin receptor (rat), 1050
 ST271, phospholipase C inhibition by (human), 823
 Striatal dopamine receptor, in chromaffin cell (bovine), 40
 Suramin, lung fibrosarcoma cell resistance to, topoisomerase activities in (hamster), 898

T

Tau phosphorylation, in brain (human), 745
 Taxol, prostate cancer cell apoptosis and (human), 1106
 Terfenadine, cardiac potassium current blockade by (human), 181
 Testosterone analogs, tissue-specific pharmacology of (dog), 1080
 Tetrachlorodibenzo-*p*-dioxin, adipose and brain glucose transporters and (mouse), 65
 Thioguanine, thiopurine *S*-methyltransferase methylation of (human), 1141
 Thiopurine *S*-methyltransferase, mercaptopurine and thioguanine methylation by (human), 1141
 Thrombin, mesangial cell endothelin receptor regulation by (rat), 1156
 Thyrotropin-releasing hormone receptor, transmembrane arginines in (mouse), 480
 T lymphoid cell, PMEA-resistant (human), 391
 Topoisomerase I, camptothecin-induced (KB cells), 907
 Topoisomerase II α promoter, *trans*-activation of, in leukemia cell (human), 696
 Topoisomerases I and II, in suramin-resistant lung fibrosarcoma cells (hamster), 898
 Tubulin, dolastatin 10 interaction with (bovine), 965
 Tyrosine phosphorylation, in hepatoma cell, chromium and (rat), 686

U

U-937 cell, promonocytic, purinergic P₂ receptors of (human), 104
 U-37883, receptor binding of, in kidney membrane (pig), 155

V

Vasoactive intestinal peptide, elevation of pinealocyte intracellular calcium concentration by, cGMP and, 923
 Verapamil, multidrug-resistant leukemic cells and (human), 51
 Vitamin D₃
 osteosarcoma cell endothelin receptor and (rat), 266
 promonocytic U-937 cell purinergic P₂ receptor and (human), 104

W

Welwitindolinone analogs, P-glycoprotein-mediated multidrug resistance reversal by (human), 241

Z

Zinc, GABA receptor antagonism by (*Xenopus*), 595

AUTHOR INDEX TO VOLUME 47

A

- Abiteboul, M. *see* Dubois-Presle, N., 647
 Abraham, P. *see* Boja, J. W., 779
 Adachi, Y. *see* Knecht, K. T., 1028
 Aduma, P., Connelly, M. C., Srinivas, R. V., and Fridland, A. Metabolic diversity and antiviral activities of acyclic nucleoside phosphonates, 816
 Albrightson, C. R., Pullen, M., Wu, H.-L., Dytko, G., Hersh, L. B., and Nambi, P. Thrombin-mediated down-regulation of endothelin receptors in mesangial cells coincides with the down-regulation of neutral endopeptidase activity, 1156
 Alejo-Herberg, A. *see* Beere, H. M., 986
 Allen, R. A. *see* Tsu, R. C., 835
 Ambrosini, A., Bresciani, L., Fracchia, S., Brunello, N., and Racagni, G. Metabotropic glutamate receptors negatively coupled to adenylyl cyclase inhibit *N*-methyl-D-aspartate receptor activity and prevent neurotoxicity in mesencephalic neurons *in vitro*, 1057
 Amin, J. *see* Chang, Y., 595
 Ammon, H. P. T. *see* Safayhi, H., 1212
 Andexinger, S. *see* Pippig, S., 666
 Andrade, R. *see* Torres, G. E., 191
 Antonov, S. M., Johnson, J. W., Lukomskaya, N. Y., Potapyeva, N. N., Gmiro, V. E., and Magazanik, L. G. Novel adamantane derivatives act as blockers of open ligand-gated channels and as anticonvulsants, 558
 Arcamone, F. *see* Spadari, S., 1231
 Arnold, D. J. *see* Crumb, W. J., Jr., 181
 Asselin, J. *see* Watson, S. P., 823
 Avenet, P. *see* Granger, P., 1189
 Aversa, C. R. *see* Webb, M. L., 730

B

- Bacchi, A., Mori, G., Pelizzi, G., and Pelosi, G. Polymorphism-structure relationships of rifamexil, an antibiotic rifamycin derivative, 611
 Bacsí, S. G., Reisz-Porszasz, S., and Hankinson, O. Orientation of the heterodimeric aryl hydrocarbon (dioxin) receptor complex on its asymmetric DNA recognition sequence, 432
 Báenard, J. *see* Muller, C., 51
 Bai, R., Taylor, G. F., Schmidt, J. M., Williams, M. D., Kepler, J. A., Pettit, G. R., and Hamel, E. Interaction of dolastatin 10 with tubulin: induction of aggregation and binding and dissociation reactions, 965
 Bailly, J. D. *see* Muller, C., 51
 Bain, C. J. *see* Wafford, K. A., 374
 Bao, Y. *see* Sands, H., 636
 Baricordi, O. *see* Larini, F., 21
 Barouki, R. *see* de Waziers, I., 474
 Basha, F. *see* Nakane, M., 831
 Battaglia, G. *see* Copani, A., 890
 Battey, J. F. *see* Benya, R. V., 10
 Bayless, A. V. *see* Rogers, M. J., 398
 Beaune, P. H. *see* de Waziers, I., 474
 Beavo, J. A. *see* Beltman, J., 330
 Beavo, J. A. *see* Butt, E., 340
 Becker, D. E. *see* Beltman, J., 330
 Becker, D. E. *see* Butt, E., 340

- Becker, M. A. *see* Fry, D. W., 810
 Beere, H. M., Chresta, C. M., Alejo-Herberg, A., Skladanowski, A., Dive, C., Larsen, A. K., and Hickman, J. A. Investigation of the mechanism of higher order chromatin fragmentation observed in drug-induced apoptosis, 986
 Beidler, D. R., and Cheng, Y.-C. Camptothecin induction of a time- and concentration-dependent decrease of topoisomerase I and its implication in camptothecin activity, 907
 Beltman, J. *see* Butt, E., 340
 Beltman, J., Becker, D. E., Butt, E., Jensen, G. S., Rybalkin, S. D., Jastorff, B., and Beavo, J. A. Characterization of cyclic nucleotide phosphodiesterases with cyclic GMP analogs: topology of the catalytic domains, 330
 Benchekroun, M. N., Parker, R., Dabholkar, M., Reed, E., and Sinha, B. K. Effects of interleukin-1 α on DNA repair in human ovarian carcinoma (NIH:OVCA-3) cells: implications in the mechanism of sensitization of *cis*-diamminedichloroplatinum(II), 1255
 Benchokroun, Y. *see* Lelièvre, S., 898
 Benovic, J. L. *see* DebBurman, S. K., 224
 Benya, R. V., Kusui, T., Pradhan, T. K., Battey, J. F., and Jensen, R. T. Expression and characterization of cloned human bombesin receptors, 10
 Ber, E. *see* Cascieri, M. A., 660
 Berg, D. K. *see* Pugh, P. C., 717
 Berger, T. S. *see* Pathirana, C., 630
 Bianchi, B. R. *see* Lin, C. W., 131
 Billingsley, M. L. *see* Garver, T. D., 745
 Birdsall, N. J. M. *see* Matsui, H., 88
 Biton, B. *see* Granger, P., 1189
 Bittman, R. *see* Gomez-Muñoz, A., 883
 Bloom, J. W. *see* Witt-Enderby, P. A., 485
 Blumberg, P. M. *see* Szallasi, Z., 258
 Blume, R. *see* Schwaninger, M., 1112
 Bock, M.-D. *see* Pradier, L., 314
 Bockaert, J. *see* Fagni, L., 1239
 Boja, J. W., Cadet, J. L., Kopajtic, T. A., Lever, J., Seltzman, H. H., Wyrick, C. D., Lewin, A. H., Abraham, P., and Carroll, F. I. Selective labeling of the dopamine transporter by the high affinity ligand 3 β -(4-[¹²⁵I]iodophenyl)-tropane-2 β -carboxylic acid isopropyl ester, 779
 Bolos-Sy, A. M. *see* Holland, K. D., 1217
 Bonfils, C. *see* Pichard, L., 410
 Bordier, C. *see* Muller, C., 51
 Botto, J.-M. *see* Labbé-Jullié, C., 1050
 Bouguet, J. *see* de Waziers, I., 474
 Bourson, A. *see* Sleight, A. J., 99
 Brachet-Cota, A. L. *see* Burton, G., 535
 Bradford, B. U. *see* Knecht, K. T., 1028
 Brady, C. L. *see* Houssami, S., 798
 Brandt, T. L. *see* Fraser, D. J., 696
 Bresciani, L. *see* Ambrosini, A., 1057
 Bresnick, E. *see* Chung, I., 677
 Brindley, D. N. *see* Gomez-Muñoz, A., 883
 Brittain, R. J. *see* Webb, M. L., 730
 Brodbeck, R. M., Sachais, B. S., and Krause, J. E. Residue 78 in the second transmembrane domain of the neurokinin-1 receptor is important in coupling high affinity agonist binding to multiple second messenger responses, 1065
 Brooks, A. I. *see* Pan, Y.-X., 1180

- Brown, A. M. *see* Crumb, W. J., Jr., 181
Brown, R. J. *see* Rogers, M. J., 398
Brüne, B. *see* Meßmer, U. K., 757
Brunello, N. *see* Ambrosini, A., 1057
Bruno, V. *see* Copani, A., 890
Buckpitt, A., Chang, A.-M., Weir, A., Van Winkle, L., Duan, X., Philpot, R., and Plopper, C. Relationship of cytochrome P450 activity to clara cell cytotoxicity. IV. Metabolism of naphthalene and naphthalene oxide in microdissected airways from mice, rats, and hamsters, 74
Budzik, G. P. *see* Nakane, M., 831
Bugge, B. *see* Wood, S. C., 121
Burgess, G. M. *see* Smith, J. A. M., 525
Burnier, J. P. *see* Schoenfeld, J. R., 172
Burton, G., Galigniana, M., de Lavallaz, S., Brachet-Cota, A. L., Sproviero, E. M., Ghini, A. A., Lantos, C. P., and Damasco, M. C. Sodium-retaining activity of some natural and synthetic 21-deoxysteroids, 535
Busconi, L., and Michel, T. Recombinant endothelial nitric oxide synthase: post-translational modifications in a baculovirus expression system, 655
Butt, E. *see* Beltman, J., 330
Butt, E., Beltman, J., Becker, D. E., Jensen, G. S., Rybalkin, S. D., Jastorff, B., and Beavo, J. A. Characterization of cyclic nucleotide phosphodiesterases using cyclic AMP analogs: topology of the catalytic site and comparison with other cyclic AMP-binding proteins, 340
Byun, H.-S. *see* Gomez-Muñoz, A., 883
- C**
- Cabantchik, Z. I. *see* Tsafack, A., 403
Cadet, J. L. *see* Boja, J. W., 779
Carlson, N. G. *see* Lerea, L. S., 1119
Carolo, C. *see* Sleight, A. J., 99
Carroll, F. I. *see* Boja, J. W., 779
Carter, G. W. *see* Nakane, M., 831
Cascieri, M. A., Shiao, L.-L., Mills, S. G., MacCoss, M., Swain, C. J., Yu, H., Ber, E., Sadowski, S., Wu, M. T., Strader, C. D., and Fong, T. M. Characterization of the interaction of diacylpiperazine antagonists with the human neurokinin-1 receptor: identification of a common binding site for structurally dissimilar antagonists, 660
Castro, M. A. *see* Garzón, J., 738
Catapano, C. V., Dayton, J. S., Mitchell, B. S., and Fernandes, D. J. GTP depletion induced by IMP dehydrogenase inhibitors blocks RNA-primed DNA synthesis, 948
Chabry, J. *see* Labbé-Jullié, C., 1050
Chan, S. I. *see* Chen, S., 419
Chang, A.-M. *see* Buckpitt, A., 74
Chang, D. Z., Tasayco, M. L., and Ciardelli, T. L. Structural analogs of interleukin-2: a point mutation that facilitates biological response, 206
Chang, Y., Amin, J., and Weiss, D. S. Zinc is a mixed antagonist of homomeric p1 γ -aminobutyric acid-activated channels, 595
Chao, C.-C. *see* Webb, M. L., 730
Chaput, Y. *see* Torres, G. E., 191
Chavkin, C. *see* Henry, D. J., 551
Chen, J.-Q., Ström, A., Gustafsson, J.-Å., and Morgan, E. T. Suppression of the constitutive expression of cytochrome P-450 2C11 by cytokines and interferons in primary cultures of rat hepatocytes: comparison with induction of acute-phase genes and demonstration that CYP2C11 promoter sequences are involved in the suppressive response to interleukins 1 and 6, 940
Chen, J.-S. *see* McCauley, L. D., 354
Chen, S., Deng, P. S. K., Swiderek, K., Li, M., and Chan, S. I. Interaction of flavones and their bromoacetyl derivatives with NAD(P)H: quinone acceptor oxidoreductase, 419
Chen, S., Knox, R., Lewis, A. D., Friedlos, F., Workman, P., Deng, P. S. K., Fung, M., Ebenstein, D., Wu, K., and Tsai, T.-M. Catalytic properties of NAD(P)H:quinone acceptor oxidoreductase: study involving mouse, rat, human, and mouse-rat chimeric enzymes, 934
Chen, S. T. *see* Olins, G. M., 115
Cheng, J. *see* Pan, Y.-X., 1180
Cheng, Y.-C. *see* Beidler, D. R., 907
Chidester, D. *see* Sands, H., 636
Choudhary, M. S., Sachs, N., Uluer, A., Glennon, R. A., Westkaemper, R. B., and Roth, B. L. Differential ergoline and ergopeptide binding to 5-hydroxytryptamine_{2A} receptors: ergolines require an aromatic residue at position 340 for high affinity binding, 450
Chresta, C. M. *see* Beere, H. M., 986
Chung, I., and Bresnick, E. Regulation of the constitutive expression of the human CYP1A2 gene: cis elements and their interactions with proteins, 677
Ciardelli, T. L. *see* Chang, D. Z., 206
Ciarrocchi, G. *see* Spadari, S., 1231
Clementi, E., Vecchio, I., Sciorati, C., and Nisticò, G. Nitric oxide modulation of agonist-evoked intracellular Ca²⁺ release in neurosecretory PC-12 cells: inhibition of phospholipase C activity via cyclic GMP-dependent protein kinase I, 517
Clot, J. *see* Pradier, L., 314
Cocuzza, A. J. *see* Sands, H., 636
Coffman, B. L., Green, M. D., King, C. D., and Tephly, T. R. Cloning and stable expression of a cDNA encoding a rat liver UDP-glucuronosyltransferase (UDP-glucuronosyltransferase 1.1) that catalyzes the glucuronidation of opioids and bilirubin, 1101
Cohen, R. A. *see* Stegeman, J. J., 296
Connelly, M. C. *see* Aduma, P., 816
Connelly, M. C. *see* Robbins, B. L., 391
Conroy, W. G. *see* Pugh, P. C., 717
Copani, A., Bruno, V., Battaglia, G., Leanza, G., Pellitteri, R., Russo, A., Stanzani, S., and Nicoletti, F. Activation of metabotropic glutamate receptors protects cultured neurons against apoptosis induced by β -amyloid peptide, 890
Cornil-Scharwitz, I. *see* Muller, C., 51
Corriveau, R. A. *see* Pugh, P. C., 717
Cosmé, J. *see* Pichard, L., 410
Costa, E. *see* Kiedrowski, L., 140
Couceyro, P., and Douglass, J. Precipitated morphine withdrawal stimulates multiple activator protein-1 signaling pathways in the rat brain, 29
Covey, D. F. *see* Holland, K. D., 1217
Crumb, W. J., Jr., Wible, B., Arnold, D. J., Payne, J. P., and Brown, A. M. Blockade of multiple human cardiac potassium currents by the antihistamine terfenadine: possible mechanism for terfenadine-associated cardiotoxicity, 181
Cruz, P. J. D. *see* Summerfield, A. E., 1080
Curi-Pedrosa, R. *see* Pichard, L., 410
- D**
- Dabholkar, M. *see* Benckekroun, M. N., 1255
Damasco, M. C. *see* Burton, G., 535
Damuni, Z. *see* Garver, T. D., 745
Danesi, R., Figg, W. D., Reed, E., and Myers, C. E. Paclitaxel (Taxol) inhibits protein isoprenylation and induces apoptosis in PC-3 human prostate cancer cells, 1106
Davidson, N. *see* Henry, D. J., 551
Dayton, J. S. *see* Catapano, C. V., 948
Dean, G. E. *see* Pan, Y.-X., 1180
de Armendi, A. J. *see* Wood, S. C., 121
DehBurman, S. K., Kunapuli, P., Benovic, J. L., and Hosey, M. M. Agonist-dependent phosphorylation of human muscarinic recep-

- tors in *Spodoptera frugiperda* insect cell membranes by G-protein-coupled receptor kinases, 224
- de Fiebre, C. M., Meyer, E. M., Henry, J. C., Muraskin, S. I., Kem, W. R., and Papke, R. L. Characterization of a series of anabaseine-derived compounds reveals that the 3-(4)-dimethylaminocinnamylidene derivative is a selective agonist at neuronal nicotinic $\alpha 7/125$ $\text{I}\alpha$ -bungarotoxin receptor subtypes, 164
- de Lavallaz, S. *see* Burton, G., 535
- del Valle, M. *see* Maroto, R., 40
- Deng, P. S. K. *see* Chen, S., 419, 934
- Depoortere, H. *see* Granger, P., 1189
- de Waziers, I., Garlatti, M., Bouguet, J., Beaune, P. H., and Barouki, R. Insulin down-regulates cytochrome P450 2B and 2E expression at the post-transcriptional level in the rat hepatoma cell line, 474
- Díaz, R. S., and Monreal, J. Protein-independent lead permeation through myelin lipid liposomes, 766
- Dive, C. *see* Beere, H. M., 986
- Dlugosz, A. A. *see* Szallasi, Z., 258
- Dolenga, M. P. *see* Summerfield, A. E., 1080
- Domergue, J. *see* Pichard, L., 410
- Donnelly, J. L. *see* Nakane, M., 831
- Douglass, J. *see* Couceyro, P., 29
- Drobny, H. *see* Pifl, C., 368
- Du, Y.-L., Wilcox, B. D., and Jeffrey, J. J. Regulation of rat 5-hydroxytryptamine type 2 receptor gene activity: identification of *cis* elements that mediate basal and 5-hydroxytryptamine-dependent gene activation, 915
- Duan, X. *see* Buckpitt, A., 74
- Dubois-Presle, N., Lapique, F., Maurice, M.-H., Fournel-Gigleux, S., Magdalou, J., Abiteboul, M., Siest, G., and Netter, P. Stereoselective esterase activity of human serum albumin toward ketoprofen glucuronide, 647
- Duffy, P. A. *see* Gomez-Muñoz, A., 883
- Dunlap, K. *see* Turner, T. J., 348
- Dytko, G. *see* Albrightson, C. R., 1156
- E**
- Ebenstein, D. *see* Chen, S., 934
- Ebetino, F. H. *see* Rogers, M. J., 398
- Eddlestone, G. T., Komatsu, M., Shen, L., and Sharp, G. W. G. Mastoparan increases the intracellular free calcium concentration in two insulin-secreting cell lines by inhibition of ATP-sensitive potassium channels, 787
- Emile, L. *see* Pradier, L., 314
- Epand, R. M. *see* Houssami, S., 798
- Erickson, L. C. *see* Pieper, R. O., 290
- Erneux, C. *see* Wilcox, R. A., 1204
- Esbenshade, T. A., Hirasawa, A., Tsujimoto, G., Tanaka, T., Yano, J., Minneman, K. P., and Murphy, T. J. Cloning of the human α_{1A} -adrenergic receptor and inducible expression of three human subtypes in SK-N-MC cells, 977
- Evans, C. J. *see* Piro, E. T., 1041
- Evans, W. E. *see* Krynetski, E. Y., 1141
- F**
- Fagni, L., Olivier, M., Lafon-Cazal, M., and Bockaert, J. Involvement of divalent ions in the nitric oxide-induced blockade of *N*-methyl-D-aspartate receptors in cerebellar granule cells, 1239
- Fan, P. Nonopioid mechanism of morphine modulation of the activation of 5-hydroxytryptamine type 3 receptors, 491
- Fardin, V. *see* Pradier, L., 314
- Faure, C. *see* Granger, P., 1189
- Feldman, R. I. *see* Wu, J. M., 871
- Fenical, W. *see* Pathirana, C., 630
- Fernandes, D. J. *see* Catapano, C. V., 948
- Ferrandis, E. *see* Muller, C., 51
- Ferrendelli, J. A. *see* Holland, K. D., 1217
- Figg, W. D. *see* Danesi, R., 1106
- Findlay, D. M. *see* Houssami, S., 798
- Fleming, W. W. *see* Hershman, K. M., 726
- Focher, F. *see* Spadari, S., 1231
- Fong, T. M. *see* Cascieri, M. A., 660
- Fosset, M. *see* Meisner, K., 155
- Fournel-Gigleux, S. *see* Dubois-Presle, N., 647
- Fracchia, S. *see* Ambrosini, A., 1057
- Frail, D. E. *see* Lin, C. W., 131
- Fraser, D. J., Brandt, T. L., and Kroll, D. J. Topoisomerase II α promoter *trans*-activation early in monocytic differentiation of HL-60 human leukemia cells, 696
- Freeman, L. C., and Kass, R. S. Cholinergic inhibition of slow delayed-rectifier K^+ current in guinea pig sino-atrial node is not mediated by muscarinic receptors, 1248
- Fridland, A. *see* Aduma, P., 816
- Fridland, A. *see* Robbins, B. L., 391
- Friedlos, F. *see* Chen, S., 934
- Friedman, E. *see* Gurdal, H., 772
- Fry, D. W., Becker, M. A., and Switzer, R. L. Inhibition of human 5-phosphoribosyl-1-pyrophosphate synthetase by 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-*d*]pyrimidine-5'-monophosphate: evidence for interaction at the ADP allosteric site, 810
- Fung, M. *see* Chen, S., 934
- G**
- Galigniana, M. *see* Burton, G., 535
- Garau, F. *see* Sanna, E., 213
- Garbesi, A. *see* Spadari, S., 1231
- García, A. G. *see* Maroto, R., 40
- Garlatti, M. *see* de Waziers, I., 474
- Garret, C. *see* Pradier, L., 314
- Garver, T. D., Oyler, G. A., Harris, K. A., Polavarapu, R., Damuni, Z., Lehman, R. A. W., and Billingsley, M. L. Tau phosphorylation in brain slices: pharmacological evidence for convergent effects of protein phosphatases on tau and mitogen-activated protein kinase, 745
- Garzón, J., Juarros, J. L., Castro, M. A., and Sánchez-Blázquez, P. Antibodies to the cloned μ -opioid receptor detect various molecular weight forms in areas of mouse brain, 738
- Gee, K. W. *see* McCauley, L. D., 354
- Gershengorn, M. C. *see* Perlman, J. H., 480
- Ghadge, G. D. *see* Jordan, J., 1095
- Ghini, A. A. *see* Burton, G., 535
- Gigg, R. *see* Wilcox, R. A., 1204
- Glennon, R. A. *see* Choudhary, M. S., 450
- Gmiro, V. E. *see* Antonov, S. M., 558
- Goldman, M. E. *see* Pathirana, C., 630
- Golenser, J. *see* Tsafack, A., 403
- Gomez-Muñoz, A., Duffy, P. A., Martin, A., O'Brien, L., Byun, H.-S., Bittman, R., and Brindley, D. N. Short-chain ceramide-1-phosphates are novel stimulators of DNA synthesis and cell division: antagonism by cell-permeable ceramides, 883
- Gorey-Feret, L. J. *see* Sands, H., 636
- Goubin, F. *see* Muller, C., 51
- Graham, D. *see* Granger, P., 1189
- Grandy, D. K. *see* Henry, D. J., 551
- Grandy, D. K. *see* Hjorth, S. A., 1089
- Granger, P., Biton, B., Faure, C., Vigé, X., Depoortere, H., Graham, D., Langer, S. Z., Scatton, B., and Avenet, P. Modulation of the γ -aminobutyric acid type A receptor by the antiepileptic drugs carbamazepine and phenytoin, 1189
- Green, M. D. *see* Coffman, B. L., 1101
- Grünbaum, L. *see* Hagelüken, A., 234
- Gu, H. *see* Wall, S. C., 544

- Guastella, J. *see* Woodward, R. M., 568
 Guengerich, F. P. *see* Pichard, L., 410
 Guggino, W. B. *see* Li, X.-J., 1133
 Guillemare, E., Lazdunski, M., and Honore, E. Glibenclamide opens ATP-sensitive potassium channels in *Xenopus* oocyte follicular cells during metabolic stress, 588
 Gully, D. *see* Labbé-Jullié, C., 1050
 Gurdal, H., Friedman, E., and Johnson, M. D. β -Adrenoceptor- $G_{\alpha s}$ coupling decreases with age in rat aorta, 772
 Gustafsson, J.-Å *see* Chen, J.-Q., 940

H

- Habert-Ortoli, E. *see* Pradier, L., 314
 Hadcock, J. R. *see* Ozenberger, B. A., 82
 Hagelüken, A., Nürnberg, B., Harhammer, R., Grünbaum, L., Schunack, W., and Seifert, R. The class III antiarrhythmic drug amiodarone directly activates pertussis toxin-sensitive G proteins, 234
 Hahn, M. E. *see* Stegeman, J. J., 296
 Hales, T. G. *see* Piro, E. T., 1041
 Halonen, M. *see* Witt-Enderby, P. A., 485
 Hamacher, L. *see* Verghese, M. W., 1164
 Hamel, E. *see* Bai, R., 965
 Hankinson, O. *see* Bacsi, S. G., 432
 Hansen, K. R. *see* Puffinbarger, N. K., 1126
 Harhammer, R. *see* Hagelüken, A., 234
 Harris, B. D., Wong, G., Moody, E. J., and Skolnick, P. Different subunit requirements for volatile and nonvolatile anesthetics at γ -aminobutyric acid type A receptors, 363
 Harris, K. A. *see* Garver, T. D., 745
 Harris, R. A. *see* Sanna, E., 213
 Hawkinson, J. E. *see* McCauley, L. D., 354
 Henderson, C. J. *see* Rane, A., 57
 Henry, D. J., Grandy, D. K., Lester, H. A., Davidson, N., and Chavkin, C. κ -Opioid receptors couple to inwardly rectifying potassium channels when coexpressed by *Xenopus* oocytes, 551
 Henry, J. C. *see* de Fiebre, C. M., 164
 Hersh, L. B. *see* Albrightson, C. R., 1156
 Hershman, K. M., Taylor, D. A., and Fleming, W. W. Adaptive supersensitivity and the Na^+/K^+ pump in the guinea pig vas deferens: time course of the decline in the $\alpha 2$ subunit, 726
 Hickman, J. A. *see* Beere, H. M., 986
 Hildebrandt, J. D. *see* Mullikin-Kilpatrick, D., 997
 Hirasawa, A. *see* Ebsenshade, T. A., 977
 Hjorth, S. A. *see* Schambye, H. T., 425
 Hjorth, S. A., Thirstrup, K., Grandy, D. K., and Schwartz, T. W. Analysis of selective binding epitopes for the κ -opioid receptor antagonist nor-binaltorphimine, 1089
 Ho, S. P. *see* Sands, H., 636
 Hoang, D. O. *see* Wu, J. M., 871
 Hobbs, F. W. *see* Sands, H., 636
 Holford, J. *see* Smith, J. A. M., 525
 Holland, K. D., Mathews, G. C., Bolos-Sy, A. M., Tucker, J. B., Reddy, P. A., Covey, D. F., Ferrendelli, J. A., and Rothman, S. M. Dual modulation of the γ -aminobutyric acid type A receptor/ionophore by alkyl-substituted γ -butyrolactones, 1217
 Holtzclaw, L. *see* Schaad, N. C., 923
 Honore, E. *see* Guillemare, E., 588
 Hornykiewicz, O. *see* Pifl, C., 368
 Hosey, M. M. *see* DebBurman, S. K., 224
 Houssami, S., Findlay, D. M., Brady, C. L., Martin, T. J., Epand, R. M., Moore, E. E., Murayama, E., Tamura, T., Orlowski, R. C., and Sexton, P. M. Divergent structural requirements exist for calcitonin receptor binding specificity and adenylate cyclase activation, 798
 Huettner, J. E. *see* Wilding, T. J., 582

- Huettner, J. E. *see* Woodward, R. M., 568
 Humphrey, S. *see* Meisner, K., 155

I

- Iafrate, E. *see* Spadari, S., 1231
 Ianiro, T. *see* Pathirana, C., 630
 Iimuro, Y. *see* Knecht, K. T., 1028
 Irwin, R. P. *see* Yan, G.-M., 248
 Ishimoto, H. *see* Matsuoka, I., 855

J

- Jacobson, E. *see* Pan, Y.-X., 1180
 Jacqz-Aigrain, E. *see* Pichard, L., 410
 Jastorff, B. *see* Beltman, J., 330
 Jastorff, B. *see* Butt, E., 340
 Jeffrey, J. J. *see* Du, Y.-L., 915
 Jensen, G. S. *see* Beltman, J., 330
 Jensen, G. S. *see* Butt, E., 340
 Jensen, R. T. *see* Benya, R. V., 10
 Ji, X. *see* Xiao, R.-P., 322
 Jin, S.-L. C. *see* Verghese, M. W., 1164
 Johnson, J. W. *see* Antonov, S. M., 558
 Johnson, M. D. *see* Gurdal, H., 772
 Jordan, J., Ghadge, G. D., Prehn, J. H. M., Toth, P. T., Roos, R. P., and Miller, R. J. Expression of human copper/zinc-superoxide dismutase inhibits the death of rat sympathetic neurons caused by withdrawal of nerve growth factor, 1095
 Joy, J. S. *see* Stegeman, J. J., 296
 Joyeux, H. *see* Pichard, L., 410
 Juarros, J. L. *see* Garzón, J., 738

K

- Kadiiska, M. *see* Knecht, K. T., 1028
 Kankaanranta, H., and Moilanen, E. Flufenamic and tolfenamic acids inhibit calcium influx in human polymorphonuclear leukocytes, 1006
 Karanian, J. W. *see* Poling, J. S., 381
 Kass, R. S. *see* Freeman, L. C., 1248
 Kathoria, M. *see* Wafford, K. A., 374
 Katz, A. *see* Lee, C. H., 218
 Keana, J. F. W. *see* Woodward, R. M., 568
 Keating, M. J. *see* Yang, L.-Y., 1072
 Kellermann, O. *see* Loric, S., 458
 Kelly, K. M. *see* Massa, E., 707
 Kem, W. R. *see* de Fiebre, C. M., 164
 Kemp, J. A. *see* Wafford, K. A., 374
 Kepler, J. A. *see* Bai, R., 965
 Kiedrowski, L., and Costa, E. Glutamate-induced destabilization of intracellular calcium concentration homeostasis in cultured cerebellar granule cells: role of mitochondria in calcium buffering, 140
 Kim, G. *see* Yurkow, E. J., 686
 King, C. D. *see* Coffman, B. L., 1101
 Kitabgi, P. *see* Labbé-Jullié, C., 1050
 Klein, D. C. *see* Roseboom, P. H., 439
 Klein, D. C. *see* Schaad, N. C., 923
 Klinghofer, V. *see* Nakane, M., 831
 Knecht, K. T., Adachi, Y., Bradford, B. U., Iimuro, Y., Kadiiska, M., Qun-hui, X., and Thurman, R. G. Free radical adducts in the bile of rats treated chronically with intragastric alcohol: inhibition by destruction of Kupffer cells, 1028
 Knepel, W. *see* Schwaninger, M., 1112
 Knox, R. *see* Chen, S., 934
 Knudsen, T. B. *see* Puffinbarger, N. K., 1126
 Komatsu, M. *see* Eddlestone, G. T., 787

- Komatsu, M., McDermott, A. M., and Sharp, G. W. G. Sodium fluoride stimulates exocytosis at a late site of calcium interaction in stimulus-secretion coupling: studies with the RINm5F β cell line, 496
- Kong, Y. *see* Patel, D. R., 467
- Kopajtic, T. A. *see* Boja, J. W., 779
- Korpi, E. R., Kuner, T., Seeburg, P. H., and Lüddens, H. Selective antagonist for the cerebellar granule cell-specific γ -aminobutyric acid type A receptor, 283
- Kosa, K. *see* Szallasi, Z., 258
- Krause, J. E. *see* Brodbeck, R. M., 1065
- Kroll, D. J. *see* Fraser, D. J., 696
- Krynetskaia, N. F. *see* Krynetski, E. Y., 1141
- Krynetski, E. Y., Krynetskaia, N. F., Yanishevski, Y., and Evans, W. E. Methylation of mercaptopurine, thioguanine, and their nucleotide metabolites by heterologously expressed human thiopurine S-methyltransferase, 1141
- Kuk, J. E. *see* Nakane, M., 831
- Kunapuli, P. *see* DeBurrman, S. K., 224
- Kuner, T. *see* Korpi, E. R., 283
- Kusaka, M., and Sperelakis, N. Direct block of calcium channels by dioctanoylglycerol in pregnant rat myometrial cells, 842
- Kusui, T. *see* Benya, R. V., 10
- Kuznetsov, A. *see* Ma, G. H., 1035
- L**
- Laakkonen, L. *see* Perlman, J. H., 480
- Labbé-Jullié, C., Botto, J.-M., Mas, M.-V., Chabry, J., Mazella, J., Vincent, J.-P., Gully, D., Maffrand, J.-P., and Kitabgi, P. [3 H]SR 48692, the first nonpeptide neurotensin antagonist radioligand: characterization of binding properties and evidence for distinct agonist and antagonist binding domains on the rat neurotensin receptor, 1050
- Lafon-Cazal, M. *see* Fagni, L., 1239
- Lai, J. *see* Witt-Enderby, P. A., 485
- Lakatta, E. G. *see* Xiao, R.-P., 322
- Lampe, R. A. *see* Turner, T. J., 348
- Lan, N. C. *see* McCauley, L. D., 354
- Langer, S. Z. *see* Granger, P., 1189
- Lantos, C. P. *see* Burton, G., 535
- Láopez, M. G. *see* Maroto, R., 40
- Lapetina, E. G. *see* Meßmer, U. K., 757
- Lapicque, F. *see* Dubois-Presle, N., 647
- Larini, F., Menegazzi, P., Baricordi, O., Zorzato, F., and Treves, S. A ryanodine receptor-like Ca^{2+} channel is expressed in nonexcitable cells, 21
- Larsen, A. K. *see* Beere, H. M., 986
- Larsen, A. K. *see* Lelièvre, S., 898
- Launay, J.-M. *see* Loric, S., 458
- Laurent, A. B. *see* Puffinbarger, N. K., 1126
- Laurent, G. *see* Muller, C., 51
- Law, P. Y. *see* Piro, E. T., 1041
- Lazareno, S. *see* Matsui, H., 88
- Lazdunski, M. *see* Guillemare, E., 588
- Lazdunski, M. *see* Meisheri, K., 155
- Leanza, G. *see* Copani, A., 890
- Le Bourdellès, B. *see* Wafford, K. A., 374
- Lee, C. H., Katz, A., and Simon, M. I. Multiple regions of $\text{G}_{\alpha 16}$ contribute to the specificity of activation by the C5a receptor, 218
- Le Guern, J. *see* Pradier, L., 314
- Lehman, R. A. W. *see* Garver, T. D., 745
- Lelièvre, S., Benchokroun, Y., and Larsen, A. K. Altered topoisomerase I and II activities in suramin-resistant lung fibrosarcoma cells, 898
- Lenhard, J. M. *see* Verghese, M. W., 1164
- Lerea, L. S., Carlson, N. G., and McNamara, J. O. *N*-methyl-D-aspartate receptors activate transcription of *c-fos* and *NGFI-A* by distinct phospholipase A_2 -requiring intracellular signaling pathways, 1119
- Lester, H. A. *see* Henry, D. J., 551
- Lever, J. *see* Boja, J. W., 779
- Lewin, A. H. *see* Boja, J. W., 779
- Lewis, A. D. *see* Chen, S., 934
- Li, F., Owens, N., and Verdoorn, T. A. Functional effects of mutations in the putative agonist binding region of recombinant α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors, 148
- Li, L. *see* Yang, L.-Y., 1072
- Li, M. *see* Chen, S., 419
- Li, X.-J., Xu, R.-H., Guggino, W. B., and Snyder, S. H. Alternatively spliced forms of the α subunit of the epithelial sodium channel: Distinct sites for amiloride binding and channel pore, 1133
- Libman, J. *see* Tsafack, A., 403
- Lin, C. W., Miller, T. R., Witte, D. G., Bianchi, B. R., Stashko, M., Manelli, A. M., and Frail, D. E. Characterization of cloned human dopamine D1 receptor-mediated calcium release in 293 cells, 131
- Lin, S.-Z. *see* Yan, G.-M., 248
- Linden, J. *see* Luthin, D. R., 307
- Lipshutz, D. *see* Nambi, P., 266
- Liu, E. C. K. *see* Webb, M. L., 730
- Liu, P. C. C., and Matsumura, F. Differential effect of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin on the "adipose-type" and "brain-type" glucose transporters in mice, 65
- Liu, V. *see* McCauley, L. D., 354
- Liu, Z. *see* Rane, A., 57
- Loh, H. H. *see* Piro, E. T., 1041
- Lohse, M. J. *see* Pippig, S., 666
- Loquet, I. *see* Pradier, L., 314
- Loric, S., Maroteaux, L., Kellermann, O., and Launay, J.-M. Functional serotonin-2B receptors are expressed by a teratocarcinoma-derived cell line during serotonergic differentiation, 458
- Lowe, D. G. *see* Schoenfeld, J. R., 172
- Lüddens, H. *see* Korpi, E. R., 283
- Lukomskaya, N. Y. *see* Antonov, S. M., 558
- Luthin, D. R., Olsson, R. A., Thompson, R. D., Sawmiller, D. R., and Linden, J. Characterization of two affinity states of adenosine A_{2a} receptors with a new radioligand, 2-[2-(4-amino-3-[125 I]iodophenyl)ethylamino]-adenosine, 307
- M**
- Ma, G. H., Miller, R. J., Kuznetsov, A., and Philipson, L. H. κ -Opioid receptor activates an inwardly rectifying K^+ channel by a G protein-linked mechanism: coexpression in *Xenopus* oocytes, 1035
- MacCoss, M. *see* Cascieri, M. A., 660
- Macdonald, R. L. *see* Massa, E., 707
- Madara, J. L. *see* Puffinbarger, N. K., 1126
- Maffrand, J.-P. *see* Labbé-Jullié, C., 1050
- Maga, G. *see* Spadari, S., 1231
- Magazanik, L. G. *see* Antonov, S. M., 558
- Magdalou, J. *see* Dubois-Presle, N., 647
- Mais, D. E. *see* Pathirana, C., 630
- Makhlof, G. M. *see* Murthy, K. S., 1172
- Malayev, A. A., Nelson, D. J., and Philipson, L. H. Mechanism of clofilium block of the human Kv1.5 delayed rectifier potassium channel, 198
- Manelli, A. M. *see* Lin, C. W., 131
- Manzini, S. *see* Spadari, S., 1231
- Maroteaux, L. *see* Loric, S., 458
- Maroto, R., Láopez, M. G., del Valle, M., Naranjo, J. R., Mellström, B., and García, A. G. Expression of the bovine striatal D_2 receptor, but not the D_1 receptor, in bovine adrenal medulla, 40

- Marshall, D. R. *see* Robbins, B. L., 391
Marshall, G. *see* Wafford, K. A., 374
Martin, A. *see* Gomez-Muñoz, A., 883
Martin, T. J. *see* Houssami, S., 798
Mas, M.-V. *see* Labbé-Jullié, C., 1050
Massa, E., Kelly, K. M., Yule, D. I., Macdonald, R. L., and Uhler, M. D. Comparison of fura-2 imaging and electrophysiological analysis of murine calcium channel $\alpha 1$ subunits coexpressed with novel $\beta 2$ subunit isoforms, 707
Mathews, G. C. *see* Holland, K. D., 1217
Matsui, H., Lazareno, S., and Birdsall, N. J. M. Probing of the location of the allosteric site on m1 muscarinic receptors by site-directed mutagenesis, 88
Matsumura, F. *see* Liu, P. C. C., 65
Matsuoka, I., Zhou, Q., Ishimoto, H., and Nakanishi, H. Extracellular ATP stimulates adenylyl cyclase and phospholipase C through distinct purinoceptors in NG108-15 cells, 855
Maurel, P. *see* Pichard, L., 410
Maurice, M.-H. *see* Dubois-Presle, N., 647
Mayaux, J.-F. *see* Pradier, L., 314
Mazella, J. *see* Labbé-Jullié, C., 1050
McCauley, L. D., Liu, V., Chen, J.-S., Hawkinson, J. E., Lan, N. C., and Gee, K. W. Selective actions of certain neuroactive pregnanediols at the γ -aminobutyric acid type A receptor complex in rat brain, 354
McCay, P. B. *see* Moore, D. R., 1224
McConnell, R. T. *see* Vergheze, M. W., 1164
McDermott, A. M. *see* Komatsu, M., 496
McMahon, E. G. *see* Olins, G. M., 115
McNamara, J. O. *see* Lerea, L. S., 1119
Mehta, N. D. *see* Mullikin-Kilpatrick, D., 997
Meisner, K., Fosset, M., Humphrey, S., and Lazdunski, M. Receptor binding characterization in kidney membrane of [3 H]U-37883, a novel ATP-sensitive K $^+$ channel blocker with diuretic/Natriuretic properties, 155
Mellström, B. *see* Maroto, R., 40
Menegazzi, P. *see* Larini, F., 21
Mercken, L. *see* Pradier, L., 314
Meßmer, U. K., Lapetina, E. G., and Brüne, B. Nitric oxide-induced apoptosis in RAW 264.7 macrophages is antagonized by protein kinase C- and protein kinase A-activating compounds, 757
Meyer, E. M. *see* de Fiebre, C. M., 164
Michel, T. *see* Busconi, L., 655
Miller, K. W. *see* Wood, S. C., 121
Miller, R. J. *see* Jordan, J., 1095
Miller, R. J. *see* Ma, G. H., 1035
Miller, T. R. *see* Lin, C. W., 131
Mills, S. G. *see* Cascieri, M. A., 660
Minneman, K. P. *see* Esbenschade, T. A., 977
Mitchell, B. S. *see* Catapano, C. V., 948
Moilanen, E. *see* Kankaanranta, H., 1006
Moldéus, P. *see* Nakagawa, Y., 1021
Monreal, J. *see* Díaz, R. S., 766
Moody, E. J. *see* Harris, B. D., 363
Moore, D. R., Reinke, L. A., and McCay, P. B. Metabolism of ethanol to 1-hydroxyethyl radicals *in vivo*: detection with intravenous administration of α -(4-pyridyl-1-oxide)-*N*-*t*-butylnitron, 1224
Moore, E. E. *see* Houssami, S., 798
Moore, R. E. *see* Smith, C. D., 241
Morgan, E. T. *see* Chen, J.-Q., 940
Mori, G. *see* Bacchi, A., 611
Muller, C., Goubin, F., Ferrandis, E., Cornil-Scharwitz, I., Bailly, J. D., Bordier, C., Bénard, J., Sikic, B. I., and Laurent, G. Evidence for transcriptional control of human *mdr1* gene expression by verapamil in multidrug-resistant leukemic cells, 51
Mullikin-Kilpatrick, D., Mehta, N. D., Hildebrandt, J. D., and Treisman, S. N. G $_i$ is involved in ethanol inhibition of L-type calcium channels in undifferentiated but not differentiated PC-12 cells, 997
Muraskin, S. I. *see* de Fiebre, C. M., 164
Murayama, E. *see* Houssami, S., 798
Murphy, T. J. *see* Esbenschade, T. A., 977
Murthy, K. S., and Makhlof, G. M. Adenosine A $_1$ receptor-mediated activation of phospholipase C- β_3 in intestinal muscle: Dual requirement for α and $\beta\gamma$ subunits of G $_{13}$, 1172
Myers, C. E. *see* Danesi, R., 1106
- N**
- Nahorski, S. R. *see* Traynor, J. R., 848
Nahorski, S. R. *see* Wilcox, R. A., 1204
Nahorski, S. R. *see* Willars, G. B., 509
Najibi, S. *see* Stegeman, J. J., 296
Nakagawa, Y., Nakajima, K., Tayama, S., and Moldéus, P. Metabolism and cytotoxicity of propyl gallate in isolated rat hepatocytes: effects of a thiol reductant and an esterase inhibitor, 1021
Nakajima, K. *see* Nakagawa, Y., 1021
Nakane, M., Klinghofer, V., Kuk, J. E., Donnelly, J. L., Budzik, G. P., Pollock, J. S., Basha, F., and Carter, G. W. Novel potent and selective inhibitors of inducible nitric oxide synthase, 831
Nakanishi, H. *see* Matsuoka, I., 855
Nambi, P. *see* Albrightson, C. R., 1156
Nambi, P., Wu, H.-L., Lipshutz, D., and Prabhakar, U. Identification and characterization of endothelin receptors on rat osteoblastic osteosarcoma cells: down regulation by 1,25-dihydroxy-vitamin D $_3$, 266
Naranjo, J. R. *see* Maroto, R., 40
Nelson, D. J. *see* Malayev, A. A., 198
Netter, P. *see* Dubois-Presle, N., 647
Neubauer, M. *see* Webb, M. L., 730
Nicoletti, F. *see* Copani, A., 890
Nisticò, G. *see* Clementi, E., 517
Noftz, S. L. *see* Pieper, R. O., 290
Nürnberg, B. *see* Hagelüken, A., 234
- O**
- O'Brien, L. *see* Gomez-Muñoz, A., 883
Olins, G. M., Chen, S. T., McMahon, E. G., Palomo, M. A., and Reitz, D. B. Elucidation of the insurmountable nature of an angiotensin receptor antagonist, SC-54629, 115
Olivier, M. *see* Fagni, L., 1239
Olsson, R. A. *see* Luthin, D. R., 307
Orlowski, R. C. *see* Houssami, S., 798
Osman, R. *see* Perlman, J. H., 480
Owens, N. *see* Li, F., 148
Oyler, G. A. *see* Garver, T. D., 745
Ozenberger, B. A., and Hadcock, J. R. A single amino acid substitution in somatostatin receptor subtype 5 increases affinity for somatostatin-14, 82
- P**
- Palmer, J. D. *see* Witt-Enderby, P. A., 485
Palomo, M. A. *see* Olins, G. M., 115
Pan, Y.-X., Cheng, J., Xu, J., Rossi, G., Jacobson, E., Ryan-Moro, J., Brooks, A. I., Dean, G. E., Standifer, K. M., and Pasternak, G. W. Cloning and functional characterization through antisense mapping of a κ_3 -related opioid receptor, 1180
Papke, R. L. *see* de Fiebre, C. M., 164
Parker, R. *see* Benckekroun, M. N., 1255
Pasternak, G. W. *see* Pan, Y.-X., 1180
Patel, D. R., Kong, Y., and Sreedharan, S. P. Molecular cloning and expression of a human secretin receptor, 467

- Pathirana, C., Stein, R. B., Berger, T. S., Fenical, W., Ianiro, T., Mais, D. E., Torres, A., and Goldman, M. E. Nonsteroidal human progesterone receptor modulators from the marine alga *Cymopolia barbata*, 630
- Patterson, G. M. L. *see* Smith, C. D., 241
- Paul, S. M. *see* Yan, G.-M., 248
- Payne, J. P. *see* Crumb, W. J., Jr., 181
- Pecht, I. *see* Reinsprecht, M., 1014
- Pedersen, S. E. Site-selective photoaffinity labeling of the *Torpedo californica* nicotinic acetylcholine receptor by azide derivatives of ethidium bromide, 1
- Pelizzi, G. *see* Bacchi, A., 611
- Pellitteri, R. *see* Copani, A., 890
- Pelosi, G. *see* Bacchi, A., 611
- Perlman, J. H., Laakkonen, L., Osman, R., and Gershengorn, M. C. Distinct roles for arginines in transmembrane helices 6 and 7 of the thyrotropin-releasing hormone receptor, 480
- Petit, N. *see* Sleight, A. J., 99
- Pettit, G. R. *see* Bai, R., 965
- Philipson, L. H. *see* Ma, G. H., 1035
- Philipson, L. H. *see* Malayev, A. A., 198
- Philpot, R. *see* Buckpitt, A., 74
- Pichard, L., Curi-Pedrosa, R., Bonfils, C., Jacqz-Aigrain, E., Domergue, J., Joyeux, H., Cosmé, J., Guengerich, F. P., and Maurel, P. Oxidative metabolism of lansoprazole by human liver cytochromes P450, 410
- Pieper, R. O., Noftz, S. L., and Erickson, L. C. *In vitro* transcription termination by *N,N'*-bis(2-chloroethyl)-*N*-nitrosourea-induced DNA lesions, 290
- Pifl, C., Drobny, H., Reither, H., Hornykiewicz, O., and Singer, E. A. Mechanism of the dopamine-releasing action of amphetamine and cocaine: plasmalemmal dopamine versus vesicular monoamine transporter, 368
- Pippig, S., Andexinger, S., and Lohse, M. J. Sequestration and recycling of β_2 -adrenergic receptors permit receptor resensitization, 666
- Piros, E. T., Prather, P. L., Loh, H. H., Law, P. Y., Evans, C. J., and Hales, T. G. Ca^{2+} channel and adenylyl cyclase modulation by cloned μ -opioid receptors in GH₃ cells, 1041
- Plopper, C. *see* Buckpitt, A., 74
- Plunkett, W. *see* Yang, L.-Y., 1072
- Polavarapu, R. *see* Garver, T. D., 745
- Poling, J. S., Karanian, J. W., Salem, N., Jr., and Vicini, S. Time- and voltage-dependent block of delayed rectifier potassium channels by docosahexaenoic acid, 381
- Pollock, J. S. *see* Nakane, M., 831
- Poole, A. *see* Watson, S. P., 823
- Potapyeva, N. N. *see* Antonov, S. M., 558
- Prabhakar, U. *see* Nambi, P., 266
- Pradhan, T. K. *see* Benya, R. V., 10
- Pradier, L., Habert-Ortoli, E., Emile, L., Le Guern, J., Loquet, I., Bock, M.-D., Clot, J., Mercken, L., Fardin, V., Garret, C., and Mayaux, J.-F. Molecular determinants of the species selectivity of neurokinin type 1 receptor antagonists, 314
- Prather, P. L. *see* Piros, E. T., 1041
- Prehn, J. H. M. *see* Jordan, J., 1095
- Primrose, W. U. *see* Wilcox, R. A., 1204
- Puffinbarger, N. K., Hansen, K. R., Resta, R., Laurent, A. B., Knudsen, T. B., Madara, J. L., and Thompson, L. F. Production and characterization of multiple antigenic peptide antibodies to the adenosine A_{2b} receptor, 1126
- Pugh, P. C., Corriveau, R. A., Conroy, W. G., and Berg, D. K. Novel subpopulation of neuronal acetylcholine receptors among those binding α -bungarotoxin, 717
- Pullen, M. *see* Albrightson, C. R., 1156
- Quan, C. *see* Schoenfeld, J. R., 172
- Qun-hui, X. *see* Knecht, K. T., 1028

R

- Racagni, G. *see* Ambrosini, A., 1057
- Rane, A., Liu, Z., Henderson, C. J., and Wolf, C. R. Divergent regulation of cytochrome P450 enzymes by morphine and pethidine: a neuroendocrine mechanism?, 57
- Reddy, P. A. *see* Holland, K. D., 1217
- Reed, E. *see* Benchekroun, M. N., 1255
- Reed, E. *see* Danesi, R., 1106
- Reinke, L. A. *see* Moore, D. R., 1224
- Reinsprecht, M., Rohn, M. H., Spadinger, R. J., Pecht, I., Schindler, H., and Romanin, C. Blockade of capacitive Ca^{2+} influx by Cl^- channel blockers inhibits secretion from rat mucosal-type mast cells, 1014
- Reisz-Porszasz, S. *see* Bacsi, S. G., 432
- Reither, H. *see* Pifl, C., 368
- Reitz, D. B. *see* Olins, G. M., 115
- Resta, R. *see* Puffinbarger, N. K., 1126
- Rizzo, M. *see* Webb, M. L., 730
- Robbins, B. L., Connelly, M. C., Marshall, D. R., Srinivas, R. V., and Fridland, A. A human T lymphoid cell variant resistant to the acyclic nucleoside phosphonate, 9-(2-phosphonyl-methoxyethyl)adenine shows a unique combination of a phosphorylation defect and increased efflux of the agent, 391
- Rodriguez, J. V. I. R. *see* Schaad, N. C., 923
- Rogers, M. J., Xiong, X., Brown, R. J., Watts, D. J., Russell, R. G. G., Bayless, A. V., and Ebetino, F. H. Structure-activity relationships of new heterocycle-containing bisphosphonates as inhibitors of bone resorption and as inhibitors of growth of *Dictyostelium discoideum* amoebae, 398
- Rohn, M. H. *see* Reinsprecht, M., 1014
- Romanin, C. *see* Reinsprecht, M., 1014
- Roos, R. P. *see* Jordan, J., 1095
- Roseboom, P. H., and Klein, D. C. Norepinephrine stimulation of pineal cyclic AMP response element-binding protein phosphorylation: primary role of a β -adrenergic-receptor/cyclic AMP mechanism, 439
- Rossi, G. *see* Pan, Y.-X., 1180
- Rössig, L. *see* Schwaninger, M., 1112
- Roth, B. L. *see* Choudhary, M. S., 450
- Rothman, S. M. *see* Holland, K. D., 1217
- Rudnick, G. *see* Wall, S. C., 544
- Russell, J. T. *see* Schaad, N. C., 923
- Russell, R. G. G. *see* Rogers, M. J., 398
- Russo, A. *see* Copani, A., 890
- Ryan-Moro, J. *see* Pan, Y.-X., 1180
- Rybalkin, S. D. *see* Beltman, J., 330
- Rybalkin, S. D. *see* Butt, E., 340

S

- Sachais, B. S. *see* Brodbeck, R. M., 1065
- Sachs, N. *see* Choudhary, M. S., 450
- Sadowski, S. *see* Cascieri, M. A., 660
- Safayhi, H., Sailer, E.-R., and Ammon, H. P. T. Mechanism of 5-lipoxygenase inhibition by acetyl-11-keto- β -boswellic acid, 1212
- Sailer, E.-R. *see* Safayhi, H., 1212
- Salem, N., Jr. *see* Poling, J. S., 381
- Sánchez-Blázquez, P. *see* Garzón, J., 738
- Sands, H., Gorey-Feret, L. J., Ho, S. P., Bao, Y., Cocuzza, A. J., Chidester, D., and Hobbs, F. W. Biodistribution and metabolism of internally ^3H -labeled oligonucleotides: II. 3',5'-blocked oligonucleotides, 636

- Sanna, E., Garau, F., and Harris, R. A. Novel properties of homomeric β_1 γ -aminobutyric acid type A receptors: actions of the anesthetics propofol and pentobarbital, 213
- Sawmiller, D. R. *see* Luthin, D. R., 307
- Scatton, B. *see* Granger, P., 1189
- Schaad, N. C., Rodriguez, J. V. I. R., Klein, D. C., Holtzclaw, L., and Russell, J. T. Vasoactive intestinal peptide elevates pinealocyte intracellular calcium concentrations by enhancing influx: evidence for involvement of a cyclic GMP-dependent mechanism, 923
- Schambye, H. T., Hjorth, S. A., Weinstock, J., and Schwartz, T. W. Interaction between the nonpeptide angiotensin antagonist SKF-108,566 and histidine 256 (His VI:16) of the angiotensin type 1 receptor, 425
- Schindler, H. *see* Reinsprecht, M., 1014
- Schmidt, J. M. *see* Bai, R., 965
- Schoenfeld, J. R., Sehl, P., Quan, C., Burnier, J. P., and Lowe, D. G. Agonist selectivity for three species of natriuretic peptide receptor-A, 172
- Schöfl, C. *see* Schwaninger, M., 1112
- Schunack, W. *see* Hagelüken, A., 234
- Schwaninger, M., Schöfl, C., Blume, R., Rössig, L., and Knepel, W. Inhibition by antidepressant drugs of cyclic AMP response element-binding protein/cyclic AMP response element-directed gene transcription, 1112
- Schwartz, T. W. *see* Hjorth, S. A., 1089
- Schwartz, T. W. *see* Schambye, H. T., 425
- Sciorati, C. *see* Clementi, E., 517
- Seeburg, P. H. *see* Korpi, E. R., 283
- Sehl, P. *see* Schoenfeld, J. R., 172
- Seifert, R. *see* Hagelüken, A., 234
- Seltzman, H. H. *see* Boja, J. W., 779
- Sexton, P. M. *see* Houssami, S., 798
- Shamovsky, I. L. *see* von Szentpaly, L., 624
- Shanzer, A. *see* Tsafack, A., 403
- Shapiro, R. A. *see* Webb, M. L., 730
- Sharp, G. W. G. *see* Eddlestone, G. T., 787
- Sharp, G. W. G. *see* Komatsu, M., 496
- Sharp, G. W. G. *see* Tang, S. H., 863
- Shen, L. *see* Eddlestone, G. T., 787
- Shiao, L.-L. *see* Cascieri, M. A., 660
- Siest, G. *see* Dubois-Presle, N., 647
- Sikic, B. I. *see* Muller, C., 51
- Simon, M. I. *see* Lee, C. H., 218
- Singer, E. A. *see* Pifl, C., 368
- Sinha, B. K. *see* Benckekroun, M. N., 1255
- Skladanowski, A. *see* Beere, H. M., 986
- Skolnick, P. *see* Harris, B. D., 363
- Sleight, A. J., Carolo, C., Petit, N., Zwingelstein, C., and Bourson, A. Identification of 5-hydroxytryptamine₂ receptor binding sites in the rat hypothalamus: sensitivity to chronic antidepressant treatment, 99
- Smith, C. B. *see* Szallasi, Z., 258
- Smith, C. D., Zilfou, J. T., Stratmann, K., Patterson, G. M. L., and Moore, R. E. Welwitindolinone analogues that reverse P-glycoprotein-mediated multiple drug resistance, 241
- Smith, H. E. *see* Summerfield, A. E., 1080
- Smith, J. A. M., Webb, C., Holford, J., and Burgess, G. M. Signal transduction pathways for B_1 and B_2 Bradykinin receptors in bovine coronary pulmonary artery endothelial cells, 525
- Snyder, S. H. *see* Li, X.-J., 1133
- Spadari, S., Ciarrocchi, G., Foher, F., Verri, A., Maga, G., Arcamone, F., Iafrate, E., Mansini, S., Garbesi, A., and Tondelli, L. 5-Iodo-2'-deoxy-L-uridine and (E)-5-(2-Bromovinyl)-2'-deoxy-L-uridine: Selective phosphorylation by herpes simplex virus type 1 thymidine kinase, antiherpetic activity, and cytotoxicity studies, 1231
- Spadinger, R. J. *see* Reinsprecht, M., 1014
- Sperelakis, N. *see* Kusaka, M., 842
- Sproviero, E. M. *see* Burton, G., 535
- Sreedharan, S. P. *see* Patel, D. R., 467
- Srinivas, R. V. *see* Aduma, P., 816
- Srinivas, R. V. *see* Robbins, B. L., 391
- Standifer, K. M. *see* Pan, Y.-X., 1180
- Stanzani, S. *see* Copani, A., 890
- Stashko, M. *see* Lin, C. W., 131
- Stegeman, J. J., Hahn, M. E., Weisbrod, R., Woodin, B. R., Joy, J. S., Najibi, S., and Cohen, R. A. Induction of cytochrome P4501A1 by aryl hydrocarbon receptor agonists in porcine aorta endothelial cells in culture and cytochrome P1A1 activity in intact cells, 296
- Stein, R. B. *see* Pathirana, C., 630
- Strader, C. D. *see* Cascieri, M. A., 660
- Strader, C. D. *see* Summerfield, A. E., 1080
- Stratmann, K. *see* Smith, C. D., 241
- Ström, A. *see* Chen, J.-Q., 940
- Summerfield, A. E., Cruz, P. J. D., Dolenga, M. P., Smith, H. E., Strader, C. D., and Toney, J. H. Tissue-specific pharmacology of testosterone and 5 α -dihydrotestosterone analogues: characterization of a novel canine liver androgen-binding protein, 1080
- Swain, C. J. *see* Cascieri, M. A., 660
- Swiderek, K. *see* Chen, S., 419
- Swillens, S. Interpretation of binding curves obtained with high receptor concentrations: practical aid for computer analysis, 1197
- Switzer, R. L. *see* Fry, D. W., 810
- Szallasi, Z., Kosa, K., Smith, C. B., Dlugosz, A. A., Williams, E. K., Yuspa, S. H., and Blumberg, P. M. Differential regulation by anti-tumor-promoting 12-deoxyphorbol-13-phenylacetate reveals distinct roles of the classical and novel protein kinase C isozymes in biological responses of primary mouse keratinocytes, 258

T

- Tamura, T. *see* Houssami, S., 798
- Tanaka, T. *see* Esbenshade, T. A., 977
- Tang, S. H., Yaney, G. C., and Sharp, G. W. G. Unusual carbachol responses in R1Nm5F cells: evidence for a "distal" site of action in stimulus-secretion coupling, 863
- Tasayco, M. L. *see* Chang, D. Z., 206
- Tayama, S. *see* Nakagawa, Y., 1021
- Taylor, D. A. *see* Hershman, K. M., 726
- Taylor, G. F. *see* Bai, R., 965
- Tephly, T. R. *see* Coffman, B. L., 1101
- Thirstrup, K. *see* Hjorth, S. A., 1089
- Thomopoulos, P. *see* Ventura, M. A., 104
- Thompson, L. F. *see* Puffinbarger, N. K., 1126
- Thompson, R. D. *see* Luthin, D. R., 307
- Thurman, R. G. *see* Knecht, K. T., 1028
- Ticku, M. K. *see* Yu, R., 603
- Tondelli, L. *see* Spadari, S., 1231
- Toney, J. H. *see* Summerfield, A. E., 1080
- Tonner, P. H. *see* Wood, S. C., 121
- Torres, A. *see* Pathirana, C., 630
- Torres, G. E., Chaput, Y., and Andrade, R. Cyclic AMP and protein kinase A mediate 5-hydroxytryptamine type 4 receptor regulation of calcium-activated potassium current in adult hippocampal neurons, 191
- Toth, P. T. *see* Jordan, J., 1095
- Traynor, J. R., and Nahorski, S. R. Modulation by μ -opioid agonists of guanosine-5'-O-(3-[³²S]thio)triphosphate binding to membranes from human neuroblastoma SH-SY5Y cells, 848
- Treiger, B. *see* Webb, M. L., 730
- Treisman, S. N. *see* Mullikin-Kilpatrick, D., 997
- Treves, S. *see* Larini, F., 21

- Tsafack, A., Golenser, J., Libman, J., Shanzer, A., and Cabantchik, Z. I. Mode of action of iron(III) chelators as antimalarials. III. Overadditive effects in the combined action of hydroxamate-based agents on *in vitro* growth of *Plasmodium falciparum*, 403
Tsai, T.-M. *see* Chen, S., 934
Tsiokas, L., and Watson, M. Differential *in vivo* induction of immediate early genes by oxotremorine in the central nervous system of long- and short-sleep mice, 272
Tsu, R. C., Allen, R. A., and Wong, Y. H. Stimulation of type II adenylyl cyclase by chemoattractant formyl peptide and C5a receptors, 835
Tsujimoto, G. *see* Esbenshade, T. A., 977
Tucker, J. B. *see* Holland, K. D., 1217
Turner, T. J., Lampe, R. A., and Dunlap, K. Characterization of presynaptic calcium channels with θ -conotoxin MVIIC and θ -grammotoxin SIA: role for a resistant calcium channel type in neurosecretion, 348
- U
- Uhler, M. D. *see* Massa, E., 707
Uluer, A. *see* Choudhary, M. S., 450
- V
- Van Winkle, L. *see* Buckpitt, A., 74
Vaughan, R. A. Photoaffinity-labeled ligand binding domains on dopamine transporters identified by peptide mapping, 956
Vecchio, I. *see* Clementi, E., 517
Ventura, M. A., and Thomopoulos, P. ADP and ATP activate distinct signaling pathways in human promonocytic U937 cells differentiated with 1,25-dihydroxy-vitamin D₃, 104
Verdoorn, T. A. *see* Li, F., 148
Verghese, M. W., McConnell, R. T., Lenhard, J. M., Hamacher, L., and Jin, S.-L. C. Regulation of distinct cyclic AMP-specific phosphodiesterase (phosphodiesterase type 4) isozymes in human monocytic cells, 1164
Verri, A. *see* Spadari, S., 1231
Vicini, S. *see* Poling, J. S., 381
Vigé, X. *see* Granger, P., 1189
Vincent, J.-P. *see* Labbé-Jullié, C., 1050
von Szentpály, L., and Shamovsky, I. L. Molecular mechanics explanation for the stereochemical and shape selectivity of B-DNA for "bay-region" carcinogens, 624
- W
- Wafford, K. A., Kathoria, M., Bain, C. J., Marshall, G., Le Bourdellès, B., Kemp, J. A., and Whiting, P. J. Identification of amino acids in the *N*-methyl-D-aspartate receptor NR1 subunit that contribute to the glycine binding site, 374
Wall, S. C., Gu, H., and Rudnick, G. Biogenic amine flux mediated by cloned transporters stably expressed in cultured cell lines: amphetamine specificity for inhibition and efflux, 544
Warner, M. *see* Wyss, A., Jan-Åke Gustafsson, 1148
Watson, M. *see* Tsiokas, L., 272
Watson, S. P., Poole, A., and Asselin, J. Ethylene glycol bis(β -aminoethyl ether)-*N,N,N',N'*-tetraacetic acid (EGTA) and the typhostin ST271 inhibit phospholipase C in human platelets by preventing Ca²⁺ entry, 823
Watts, D. J. *see* Rogers, M. J., 398
Webb, C. *see* Smith, J. A. M., 525
Webb, M. L., Chao, C.-C., Rizzo, M., Shapiro, R. A., Neubauer, M., Liu, E. C. K., Aversa, C. R., Brittain, R. J., and Treiger, B. Cloning and expression of an endothelin receptor subtype B from human prostate that mediates contraction, 730
Weber, E. *see* Woodward, R. M., 568
Weinstock, J. *see* Schambye, H. T., 425
Weir, A. *see* Buckpitt, A., 74
Weisbrod, R. *see* Stegeman, J. J., 296
Weiss, D. S. *see* Chang, Y., 595
Westkaemper, R. B. *see* Choudhary, M. S., 450
Whiting, P. J. *see* Wafford, K. A., 374
Wible, B. *see* Crumb, W. J., Jr., 181
Wilcox, B. D. *see* Du, Y.-L., 915
Wilcox, R. A., Erneux, C., Primrose, W. U., Gigg, R., and Nahorski, S. R. 2-Hydroxyethyl- α -D-glucopyranoside-2,3',4'-trisphosphate, a novel, metabolically resistant, adenophostin A and *myo*-inositol-1,4,5-trisphosphate analogue, potentially interacts with the *myo*-inositol-1,4,5-trisphosphate receptor, 1204
Wilding, T. J., and Huettner, J. E. Differential antagonism of α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid-preferring and kainate-preferring receptors by 2,3-benzodiazepines, 582
Willars, G. B., and Nahorski, S. R. Heterologous desensitization of both phosphoinositide and Ca²⁺ signaling in SH-SY5Y neuroblastoma cells: role for intracellular Ca²⁺ store depletion?, 509
Williams, E. K. *see* Szallasi, Z., 258
Williams, M. D. *see* Bai, R., 965
Witte, D. G. *see* Lin, C. W., 131
Witt-Enderby, P. A., Yamamura, H. I., Halonen, M., Lai, J., Palmer, J. D., and Bloom, J. W. Regulation of airway muscarinic cholinergic receptor subtypes by chronic anticholinergic treatment, 485
Wolf, C. R. *see* Rane, A., 57
Wong, G. *see* Harris, B. D., 363
Wong, Y. H. *see* Tsu, R. C., 835
Wood, S. C., Tonner, P. H., de Armendi, A. J., Bugge, B., and Miller, K. W. Channel inhibition by alkanols occurs at a binding site on the nicotinic acetylcholine receptor, 121
Woodin, B. R. *see* Stegeman, J. J., 296
Woodward, R. M., Huettner, J. E., Guastella, J., Keana, J. F. W., and Weber, E. *In vitro* pharmacology of ACEA-1021 and ACEA-1031: systemically active quinoxalinediones with high affinity and selectivity for *N*-methyl-D-aspartate receptor glycine sites, 568
Workman, P. *see* Chen, S., 934
Wu, H.-L. *see* Albrightson, C. R., 1156
Wu, H.-L. *see* Nambi, P., 266
Wu, J. M., Hoang, D. O., and Feldman, R. I. Differential activation of human gastrin-releasing peptide receptor-mediated responses by bombesin analogs, 871
Wu, K. *see* Chen, S., 934
Wu, M. T. *see* Cascieri, M. A., 660
Wyrick, C. D. *see* Boja, J. W., 779
Wyss, A., Jan-Åke Gustafsson, and Warner, M. Cytochromes P450 of the 2D subfamily in rat brain, 1148
- X
- Xiao, R.-P., Ji, X., and Lakatta, E. G. Functional coupling of the β_2 -adrenoceptor to a pertussis toxin-sensitive G protein in cardiac myocytes, 322
Xiong, X. *see* Rogers, M. J., 398
Xu, J. *see* Pan, Y.-X., 1180
Xu, R.-H. *see* Li, X.-J., 1133
- Y
- Yamamura, H. I. *see* Witt-Enderby, P. A., 485
Yan, G.-M., Lin, S.-Z., Irwin, R. P., and Paul, S. M. Activation of muscarinic cholinergic receptors blocks apoptosis of cultured cerebellar granule neurons, 248
Yaney, G. C. *see* Tang, S. H., 863
Yang, L.-Y., Li, L., Keating, M. J., and Plunkett, W. Arabinosyl-2-fluoroadenine augments cisplatin cytotoxicity and inhibits cisplatin-DNA cross-link repair, 1072

Yanishevski, Y. *see* Krynetski, E. Y., 1141

Yano, J. *see* Esbenshade, T. A., 977

Yu, H. *see* Cascieri, M. A., 660

Yu, R., and Ticku, M. K. Chronic neurosteroid treatment produces functional heterologous uncoupling at the γ -aminobutyric acid type A/benzodiazepine receptor complex in mammalian cortical neurons, 603

Yule, D. I. *see* Massa, E., 707

Yurkow, E. J., and Kim, G. Effects of chromium on basal and insulin-induced tyrosine phosphorylation in H4 hepatoma cells: compar-

ison with phorbol-12-myristate-13-acetate and sodium orthovanadate, 686

Yuspa, S. H. *see* Szallasi, Z., 258

Z

Zhou, Q. *see* Matsuoka, I., 855

Zilfou, J. T. *see* Smith, C. D., 241

Zorzato, F. *see* Larini, F., 21

Zwengelstein, C. *see* Sleight, A. J., 99

An important resource for everyone
involved in research on the
metabolism of drugs and chemicals

DRUG METABOLISM AND DISPOSITION

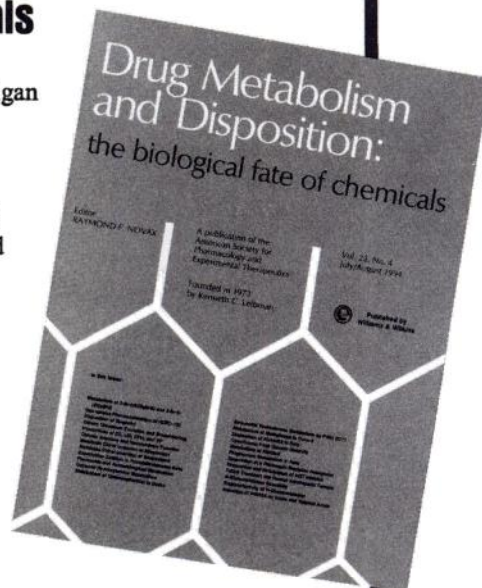
The Biological Fate of Chemicals

Editor: Raymond F. Novak, Ph.D., Wayne State University, Detroit, Michigan

DRUG METABOLISM AND DISPOSITION publishes experimental results from *in vitro* and *in vivo* systems that bring readers significant and original information on the metabolism and disposition of endogenous and exogenous compounds, including the metabolism of therapeutic agents and environmental chemicals. The journal also invites timely reviews, short communications and letters to the Editor. All submissions are refereed to ensure a high standard of publication. The areas covered are:

- metabolism, metabolite identification and mechanisms of metabolite formation
- expression of drug metabolizing enzymes
- regulation of drug metabolizing enzyme gene expression
- toxicological consequences of xenobiotic metabolism
- pharmacokinetics
- pharmacodynamics

This journal should be a standard reference in all pharmacology and toxicology departments. It is also a valuable resource for all medicinal chemists involved in drug design and all biochemists with interest in drug metabolism, expression or drug metabolizing enzymes and regulation of drug metabolizing enzyme gene expression. *Monthly*



YES! Enter my subscription:

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

Drug Metabolism and Disposition (monthly)

- ☐ Individual: \$85/yr ☐ Institutions: \$140/yr
(Please add \$20.00 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

DMD 55716

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

Printed in USA

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

J5016S ZDMD

Payment options:

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

card # _____

signature/P.O. # _____

MD 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 before October 31, 1995.

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.

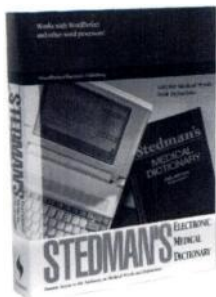


**Copyright © 1995 by the American Society for
Pharmacology and Experimental Therapeutics**

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.
- 1990** T. Kendall Harden, *Editor*; Raymond J. Dingleline, R. L. Juliano, James W. Putney, Jr., Kenneth D. Tew, Ronald G. Thurman, *Associate Editors*. University of North Carolina at Chapel Hill.

Introducing the Ultimate Words in Medicine with Instant Access to Over 100,000 Definitions!



Make Short Work of a Long Day

STEDMAN'S ELECTRONIC MEDICAL DICTIONARY *Premier Edition*

**Get instant POP-UP
access to 100,000 medical words
with definitions, including
phrases and subentries!**

**Stedman's Definitions
registered users qualify for the
super low "upgrade" price!
Call Stedman's Support
toll-free, 1-800-527-5597.**

**DOS/Windows
and MAC!**

**STEDMAN'S ELECTRONIC MEDICAL
DICTIONARY** is the easiest and most complete
electronic writing, editing, transcription and reference
tool you can buy with definitions, pronunciations,
etymologies, and hyphenations.

DOS/WIN: # 17615-3 \$129 single-user price
MAC: # 17614-5 \$129 single-user price



Call 1-800-527-5597



Fax 1-800-447-8438

7 days a week/24 hours a day



STEDMANS



**Williams & Wilkins
A Waverly Company**

428 East Preston St. • Baltimore, MD 21202-3993

SEMDFIL E43615

#1 for
impact among all
peer-reviewed
pharmacology journals
--SCI, 1993

Newsworthy and timely articles keep you up-to-date in your field.

MOLECULAR PHARMACOLOGY

Editor: **Raymond Dingleline, Ph.D.**
Emory University School of Medicine
Atlanta, Georgia

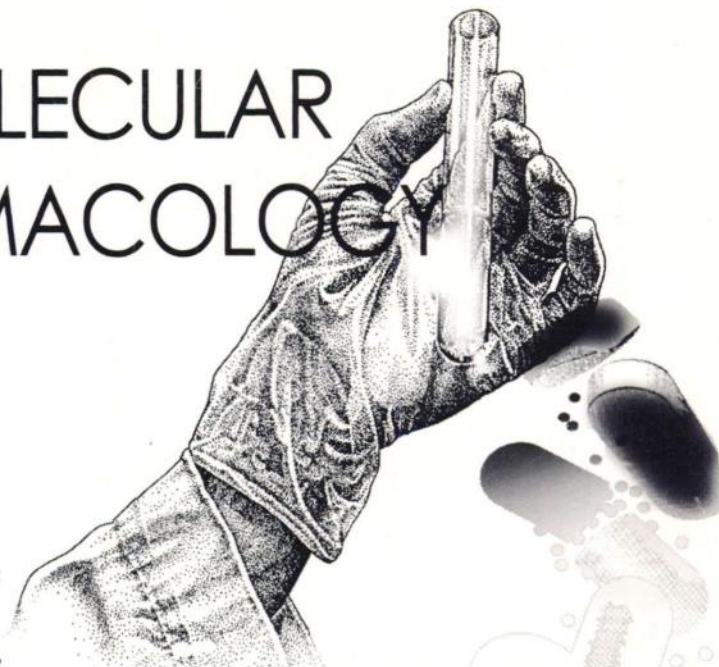
Is your special interest receptors and neurotransmitters...drug metabolism...antibiotic and anticancer drug actions...or other areas related to molecular basis of drug action? If so, you should be subscribing to **MOLECULAR PHARMACOLOGY**.

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 pharmacology and toxicology, including such areas as molecular mechanisms involved in drug receptor-effector coupling, xenobiotic metabolism, and antibiotic and anti-cancer drug action. Start your subscription today to ensure access to the most newsworthy papers in your field. *Monthly*

Cut out and send in the coupon or call toll-free to start your subscription immediately,
1-800-638-6423 from anywhere in the U.S. or Canada.



Williams & Wilkins
A WAVERLY COMPANY



YES! Enter my subscription.

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

MOLECULAR PHARMACOLOGY(monthly)

☐ Individual: \$105/yr ☐ Institution: \$230/yr
(Please add \$30.00 outside the U.S.; Canada, also add 7% GST.)

☐ New Subscription ☐ Renewal
☐ 3 yrs ☐ 2 yrs ☐ 1 yr

Name _____

Address _____

City/State/Zip _____

Payment Options:

☐ Check enclosed (payable to Williams & Wilkins)
☐ Bill me ☐ American Express
☐ MasterCard ☐ VISA

Card # _____ Exp. date _____

Signature or P.O. # _____

MD 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, 1995.

Please allow 8 weeks for delivery of your first issue. Surface mail delivery to countries outside the U.S. 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 four.

Williams & Wilkins

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

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

MOL 55742

Printed in USA

J5042S ZMOL