

## Keyword index

### Acetylcholine

Parasympathetic nervous system; Chronotropism; Inotropism; Heart; PACAP-38 (pituitary adenylate cyclase-activating polypeptide-38); PACAP-(6–38) (pituitary adenylate cyclase-activating polypeptide-(6–38)); (Dog) (Yonezawa, T. (315) 289)

### Acetylcholinesterase

Histamine-*N*-methyl transferase; Histamine  $H_3$  receptor antagonist (Morisset, S. (315) R1)

### Adenine nucleotide

Endotoxin; Platelet aggregation; PAF (platelet-activating factor) (Jarvis, G.E. (315) 203)

### Adenosine receptor blocking drug

Benzodiazepine; Diazepam; Langendorff heart; Inotropy;  $Ca^{2+}$ -entry blocking drug (Leeuwijn, R.S. (315) 153)

### Adenylyl cyclase

T-0509;  $\beta_1$ -Adrenoceptor agonist;  $\beta_1$ -Adrenoceptor; Intrinsic activity (Sato, Y. (315) 363)

### $\alpha_{1A}$ -Adrenoceptor

KMD-3213;  $\alpha_1$ -Adrenoceptor subtype; Prostate; Thoracic aorta (Yamagishi, R. (315) 73)

### $\beta_3$ -Adrenoceptor

T-0509;  $\beta_1$ -Adrenoceptor agonist; Intrinsic activity; Adenylyl cyclase (Sato, Y. (315) 363)

### $\beta_1$ -Adrenoceptor agonist

T-0509;  $\beta_1$ -Adrenoceptor; Intrinsic activity; Adenylyl cyclase (Sato, Y. (315) 363)

### $\beta$ -Adrenoceptor antagonist

Propranolol; S100 protein; Cardiac muscle;  $Mg^{2+}$  (Nakatani, K. (315) 335)

### $\alpha_1$ -Adrenoceptor subtype

KMD-3213;  $\alpha_{1A}$ -Adrenoceptor; Prostate; Thoracic aorta (Yamagishi, R. (315) 73)

### Adrenomedullin

Amylin; cAMP; Mesangial cell, cultured, rat; Immunohistochemistry; CGRP (calcitonin gene-related peptide) (Osajima, A. (315) 319)

### Aescine

Cell activation; Hypoxia; Endothelium; Neutrophil adherence; Reparil (Arnould, T. (315) 227)

### AJ-3941

Subarachnoid hemorrhage; Endothelium-dependent relaxation; Lipid peroxidation; Nimodipine;  $Ca^{2+}$  channel antagonist (Minato, H. (315) 297)

### Amnesia, delayed

Nor-binaltorphimine dihydrochloride;  $\kappa$ -Opioid receptor; Cholinergic neuronal system; Carbon monoxide (CO); U-50488H, (trans-( $\pm$ )-3,4-dichloro-*N*-methyl-*N*-(2-[1-pyrrolidinyl] cyclohexyl) benzeneacetamide methanesulfonate salt) (Hiramatsu, M. (315) 119)

### cAMP

Adrenomedullin; Amylin; Mesangial cell, cultured, rat; Immunohistochemistry; CGRP (calcitonin gene-related peptide) (Osajima, A. (315) 319)

### Amylin

Adrenomedullin; cAMP; Mesangial cell, cultured, rat; Immunohistochemistry; CGRP (calcitonin gene-related peptide) (Osajima, A. (315) 319)

### Angiotensin II

Peroxynitrite; Nitrotyrosine; Nitric oxide; Superoxide; Hemodynamics, in vivo (Kooy, N.W. (315) 165)

### Animal model

Nucleus accumbens; Dopamine; Ethanol; Microdialysis; Tolerance (Nurmi, M. (315) 277)

### Antibody

Smooth muscle; Contraction; Phospholipase C; Muscarinic; G-protein (Cuq, P. (315) 213)

### Anticonvulsant

Kynurenine; Microdialysis; Neurodegenerative disorder; Neuroprotection (Speciale, C. (315) 263)

### Arachidonic acid

Dopamine transporter; Dopamine uptake; WIN 35,428 binding; Protein kinase C; Second messenger (Zhang, L. (315) 345)

### Astrocyte, cultured

Selegiline; Hippocampal cell; Excitotoxicity; Protection; Cerebral ischemia; Nerve growth factor (NGF) (Semkova, I. (315) 19)

### Atrial myocardium refractoriness

Propafenone; 5-Hydroxypropafenone; Sinoatrial node automaticity; His bundle automaticity; AV node refractoriness; Blood pressure; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

### Autoradiography

Brain;  $\omega$ -Conotoxin GVIA;  $Ca^{2+}$  channel, N-type; (Rabbit) (Whorlow, S.L. (315) 11)

### AV node refractoriness

Propafenone; 5-Hydroxypropafenone; Sinoatrial node automaticity; His bundle automaticity; Atrial myocardium refractoriness; Blood pressure; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

### Balloon catheterization

Hyperplasia; HMG-CoA reductase inhibitor (Bandoh, T. (315) 37)

**Basal forebrain lesion**

$\sigma_1$  Receptor agonist; Cognitive enhancer; Scopolamine; Passive avoidance task; SA4503 (1-(3,4-dimethoxyphenethyl)-4-(3-phenylpropyl)piperazine dihydrochloride); (Rat) (Senda, T. (315) 1)

**Behavioral model**

$\sigma$  Receptor ligand; EMD 57445; Rimcazole; Central effect (Maj, J. (315) 235)

**Benzodiazepine**

Diazepam; Langendorff heart; Inotropy;  $\text{Ca}^{2+}$ -entry blocking drug; Adenosine receptor blocking drug (Leeuwin, R.S. (315) 153)

**Bezold-Jarisch reflex**

5-HT<sub>3</sub> receptor; Substance P; Capsaicin; (+)-Tubocurarine (Malinowska, B. (315) 159)

**Big endothelin-1**

Endothelin; Sarafotoxin; Inositol phosphate; Spinal cord; Endothelin ET<sub>A</sub> receptor (Poulat, P. (315) 327)

**Binding protein**

Pancreatic polypeptide; Neuropeptide Y (NPY); (*Conus anemone*); Neuropeptide Y-(18-36) (Czerwicz, E. (315) 355)

**Blood pressure**

Cocaine; Heart rate; Self-administration (Ambrosio, E. (315) 43)

Propafenone; 5-Hydroxypropafenone; Sinoatrial node automaticity; His bundle automaticity; Atrial myocardium refractoriness; AV node refractoriness; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

5-HT<sub>1A</sub> receptor; Heart rate; Preoptic area; Forebrain; 8-OH-DPAT (*R*-(+)-8-hydroxy-2-(di-*n*-propylamino) tetralin) (Szabó, A. (315) 187)

**BQ-123**

Coronary circulation; Endothelin ET<sub>A</sub> receptor; Endothelin ET<sub>B</sub> receptor; IRL 1620; Nitric oxide (NO) (García, J.L. (315) 179)

**Brain**

Autoradiography;  $\omega$ -Conotoxin GVIA;  $\text{Ca}^{2+}$  channel, N-type; (Rabbit) (Whorlow, S.L. (315) 11)

**Bronchoalveolar lavage fluid**

Pulmonary eosinophilia; Inflammation; Leukotriene B<sub>4</sub>; Leukotriene C<sub>4</sub>; Leukotriene D<sub>4</sub>; Leukotriene E<sub>4</sub>; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

 **$\text{Ca}^{2+}$  channel**

Contraction; Human bronchus; Protein kinase C;  $\text{Na}^+/\text{K}^+$ -ATPase (Yang, K.X.F. (315) 65)

 **$\text{Ca}^{2+}$  channel antagonist**

Subarachnoid hemorrhage; Endothelium-dependent relaxation; Lipid peroxidation; AJ-3941; Nimodipine (Minato, H. (315) 297)

 **$\text{Ca}^{2+}$  channel, N-type**

Autoradiography; Brain;  $\omega$ -Conotoxin GVIA; (Rabbit) (Whorlow, S.L. (315) 11)

 **$\text{Ca}^{2+}$ -entry blocking drug**

Benzodiazepine; Diazepam; Langendorff heart; Inotropy; Adenosine receptor blocking drug (Leeuwin, R.S. (315) 153)

 **$\text{Ca}^{2+}$ , intracellular**

Halothane; Smooth muscle, airway;  $\text{Ca}^{2+}$  sensitivity (Kai, T. (315) 313)

**Cannabinoid receptor antagonist**

Cannabinoid receptor partial agonist; 6'-Cyanohex-2'-yne- $\Delta^8$ -tetrahydrocannabinol; O-823; SR141716A; Vas deferens, mouse; Myenteric plexus-longitudinal muscle preparation; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

**Cannabinoid receptor partial agonist**

Cannabinoid receptor antagonist; 6'-Cyanohex-2'-yne- $\Delta^8$ -tetrahydrocannabinol; O-823; SR141716A; Vas deferens, mouse; Myenteric plexus-longitudinal muscle preparation; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

**Capsaicin**

5-HT<sub>3</sub> receptor; Substance P; Bezold-Jarisch reflex; (+)-Tubocurarine (Malinowska, B. (315) 159)

 **$\beta$ -Carboline**

Dopamine; Uptake; Striatum; Microdialysis; MPP<sup>+</sup> (*N*-methyl-4-phenylpyridinium) (Matsubara, K. (315) 145)

**Cardiac muscle**

$\beta$ -Adrenoceptor antagonist; Propranolol; S100 protein;  $\text{Mg}^{2+}$  (Nakatani, K. (315) 335)

 **$\text{Ca}^{2+}$  sensitivity**

Halothane; Smooth muscle, airway;  $\text{Ca}^{2+}$ , intracellular (Kai, T. (315) 313)

**Cell activation**

Hypoxia; Endothelium; Neutrophil adherence; Aescine; Reparil (Arnould, T. (315) 227)

**Cell death**

Cerebellar granule cell; Tyrosine kinase;  $\text{Li}^+$  (Grignon, S. (315) 111)

**Central effect**

$\sigma$  Receptor ligand; EMD 57445; Rimcazole; Behavioral model (Maj, J. (315) 235)

**Cerebellar granule cell**

Cell death; Tyrosine kinase;  $\text{Li}^+$  (Grignon, S. (315) 111)

**Cerebral ischemia**

Selegiline; Astrocyte, cultured; Hippocampal cell; Excitotoxicity; Protection; Nerve growth factor (NGF) (Semkova, I. (315) 19)

**Chemotherapy**

Modulator; Multidrug resistance; P-glycoprotein (Demmer, A. (315) 339)

**Cholinergic neuronal system**

Nor-binaltorphimine dihydrochloride; Amnesia, delayed;  $\kappa$ -Opioid receptor; Carbon monoxide (CO); U-50488H, (trans-( $\pm$ )-3,4-dichloro-*N*-methyl-*N*-(2-[1-pyrrolidinyl] cyclohexyl) benzeneacetamide methanesulfonate salt) (Hiramatsu, M. (315) 119)

**Chronotropism**

Parasympathetic nervous system; Acetylcholine; Inotropism; Heart; PACAP-38 (pituitary adenylate cyclase-activating polypeptide-38); PACAP-(6-38) (pituitary adenylate cyclase-activating polypeptide-(6-38)); (Dog) (Yonezawa, T. (315) 289)

**Clozapine**

Haloperidol; Fos-protein; Cross-tolerance; Nucleus accumbens; Septum, lateral (Sebens, J.B. (315) 269)

**Cocaine**

Heart rate; Blood pressure; Self-administration (Ambrosio, E. (315) 43)

**Cognitive enhancer**

$\sigma_1$  Receptor agonist; Scopolamine; Basal forebrain lesion; Passive avoidance task; SA4503 (1-(3,4-dimethoxyphenethyl)-4-(3-phenylpropyl)piperazine dihydrochloride); (Rat) (Senda, T. (315) 1)

 **$\omega$ -Conotoxin GVIA**

Autoradiography; Brain;  $\text{Ca}^{2+}$  channel, N-type; (Rabbit) (Whorlow, S.L. (315) 11)

**Contraction**

Human bronchus; Protein kinase C;  $\text{Na}^+/\text{K}^+$ -ATPase;  $\text{Ca}^{2+}$  channel (Yang, K.X.F. (315) 65)

Smooth muscle; Phospholipase C; Muscarinic; G-protein; Antibody (Cuq, P. (315) 213)

**Conus venom**

Imidazoline-binding site; Striatum; Monoamine oxidase; (Calf) (Czerwicz, E. (315) 99)

**Coronary circulation**

Endothelin  $\text{ET}_A$  receptor; Endothelin  $\text{ET}_B$  receptor; IRL 1620; BQ-123; Nitric oxide (NO) (García, J.L. (315) 179)

**Cortical slice**

Felbamate; 5,7-Dichlorokynurenine acid; Glutamate; Epilepsy (Srinivasan, J. (315) 285)

**Corticosterone**

Methadone; CRF type 1 receptor; Solution hybridization; POMC (proopiomelanocortin); CRF (corticotropin-releasing factor) (Zhou, Y. (315) 31)

**CRF type 1 receptor**

Methadone; Solution hybridization; Corticosterone; POMC (proopiomelanocortin); CRF (corticotropin-releasing factor) (Zhou, Y. (315) 31)

**Cross-tolerance**

Haloperidol; Clozapine; Fos-protein; Nucleus accumbens; Septum, lateral (Sebens, J.B. (315) 269)

**6'-Cyanohept-2'-yne- $\Delta^8$ -tetrahydrocannabinol**

Cannabinoid receptor antagonist; Cannabinoid receptor partial agonist; O-823; SR141716A; Vas deferens, mouse; Myenteric plexus-longitudinal muscle preparation; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

**Diazepam**

Benzodiazepine; Langendorff heart; Inotropy;  $\text{Ca}^{2+}$ -entry blocking drug; Adenosine receptor blocking drug (Leeuwijn, R.S. (315) 153)

**5,7-Dichlorokynurenine acid**

Felbamate; Glutamate; Epilepsy; Cortical slice (Srinivasan, J. (315) 285)

**Dopamine**

Placenta;  $\beta$ -Endorphin; Dynorphin; Perfusion; (Rat) (Stratakis, C.A. (315) 53)

$\beta$ -Carboline; Uptake; Striatum; Microdialysis;  $\text{MPP}^+$  (*N*-methyl-4-phenylpyridinium) (Matsubara, K. (315) 145)

Nucleus accumbens; Ethanol; Microdialysis; Tolerance; Animal model (Nurmi, M. (315) 277)

**Dopamine transporter**

Dopamine uptake; WIN 35,428 binding; Arachidonic acid; Protein kinase C; Second messenger (Zhang, L. (315) 345)

**Dopamine uptake**

Dopamine transporter; WIN 35,428 binding; Arachidonic acid; Protein kinase C; Second messenger (Zhang, L. (315) 345)

**Drug discrimination**

5-HT<sub>1A</sub> receptor; Efficacy; Ultrasonic vocalization; (Rat) (Sánchez, C. (315) 245)

**Dynorphin**

Dopamine; Placenta;  $\beta$ -Endorphin; Perfusion; (Rat) (Stratakis, C.A. (315) 53)

**Efficacy**

5-HT<sub>1A</sub> receptor; Ultrasonic vocalization; Drug discrimination; (Rat) (Sánchez, C. (315) 245)

**Electrophysiology**

Nodose ganglion; Guanylate cyclase; Enzyme; mRNA; Nitric oxide (NO) (Lawrence, A.J. (315) 127)

**EMD 57445**

$\sigma$  Receptor ligand; Rimcazone; Central effect; Behavioral model (Maj, J. (315) 235)

 **$\beta$ -Endorphin**

Dopamine; Placenta; Dynorphin; Perfusion; (Rat) (Stratakis, C.A. (315) 53)

**Endothelin**

Sarafotoxin; Big endothelin-1; Inositol phosphate; Spinal cord; Endothelin  $\text{ET}_A$  receptor (Poulat, P. (315) 327)

**Endothelin  $\text{ET}_A$  receptor**

Coronary circulation; Endothelin  $\text{ET}_B$  receptor; IRL 1620; BQ-123; Nitric oxide (NO) (García, J.L. (315) 179)

Endothelin; Sarafotoxin; Big endothelin-1; Inositol phosphate; Spinal cord (Poulat, P. (315) 327)

**Endothelin  $\text{ET}_B$  receptor**

Coronary circulation; Endothelin  $\text{ET}_A$  receptor; IRL 1620; BQ-123; Nitric oxide (NO) (García, J.L. (315) 179)

**Endothelium**

Cell activation; Hypoxia; Neutrophil adherence; Aescine; Reparil (Arnould, T. (315) 227)

**Endothelium-dependent relaxation**

Subarachnoid hemorrhage; Lipid peroxidation; AJ-3941; Nimodipine;  $\text{Ca}^{2+}$  channel antagonist (Minato, H. (315) 297)

**Endotoxin**

Platelet aggregation; Adenine nucleotide; PAF (platelet-activating factor) (Jarvis, G.E. (315) 203)

Superoxide; Mitochondrial respiration; Shock; Inflammation; Nitric oxide (NO) (Szabó, C. (315) 221)

**Enzyme**

Nodose ganglion; Guanylate cyclase; Electrophysiology; mRNA; Nitric oxide (NO) (Lawrence, A.J. (315) 127)

**Epilepsy**

Kava pyrone; *Piper methysticum*;  $\text{Na}^+$  channel; Synaptosome (Gleitz, J. (315) 83)

Felbamate; 5,7-Dichlorokynurenine acid; Glutamate; Cortical slice (Srinivasan, J. (315) 285)

**Ethanol**

Nucleus accumbens; Dopamine; Microdialysis; Tolerance; Animal model (Nurmi, M. (315) 277)

**Excitatory amino acid receptor**

Purinoreceptor; Pyrimidinoreceptor; Locus coeruleus; Extracellular recording (Fröhlich, R. (315) 255)

**Excitotoxicity**

Selegiline; Astrocyte, cultured; Hippocampal cell; Protection; Cerebral ischemia; Nerve growth factor (NGF) (Semkova, I. (315) 19)

**Extracellular recording**

Purinoreceptor; Pyrimidinoreceptor; Excitatory amino acid receptor; Locus coeruleus (Fröhlich, R. (315) 255)

**Felbamate**

5,7-Dichlorokynurenic acid; Glutamate; Epilepsy; Cortical slice (Srinivasan, J. (315) 285)

**Forebrain**

5-HT<sub>1A</sub> receptor; Blood pressure; Heart rate; Preoptic area; 8-OH-DPAT (*R*-(+)-8-hydroxy-2-(di-*n*-propylamino) tetralin) (Szabó, A. (315) 187)

**Fos-protein**

Haloperidol; Clozapine; Cross-tolerance; Nucleus accumbens; Septum, lateral (Sebens, J.B. (315) 269)

**Glutamate**

Felbamate; 5,7-Dichlorokynurenic acid; Epilepsy; Cortical slice (Srinivasan, J. (315) 285)

**G-protein**

Smooth muscle; Contraction; Phospholipase C; Muscarinic; Antibody (Cuq, P. (315) 213)

**Guanylate cyclase**

Nodose ganglion; Electrophysiology; Enzyme; mRNA; Nitric oxide (NO) (Lawrence, A.J. (315) 127)

**Haloperidol**

Clozapine; Fos-protein; Cross-tolerance; Nucleus accumbens; Septum, lateral (Sebens, J.B. (315) 269)

**Halothane**

Smooth muscle, airway; Ca<sup>2+</sup>, intracellular; Ca<sup>2+</sup> sensitivity (Kai, T. (315) 313)

**Heart**

Parasympathetic nervous system; Acetylcholine; Chronotropism; Inotropism; PACAP-38 (pituitary adenylate cyclase-activating polypeptide-38); PACAP-(6-38) (pituitary adenylate cyclase-activating polypeptide-(6-38)); (Dog) (Yonezawa, T. (315) 289)

**Heart rate**

Cocaine; Blood pressure; Self-administration (Ambrosio, E. (315) 43)

5-HT<sub>1A</sub> receptor; Blood pressure; Preoptic area; Forebrain; 8-OH-DPAT (*R*-(+)-8-hydroxy-2-(di-*n*-propylamino) tetralin) (Szabó, A. (315) 187)

**Hemodynamics, in vivo**

Peroxyntirite; Nitrotyrosine; Nitric oxide; Superoxide; Angiotensin II (Kooy, N.W. (315) 165)

**Hippocampal cell**

Selegiline; Astrocyte, cultured; Excitotoxicity; Protection; Cerebral ischemia; Nerve growth factor (NGF) (Semkova, I. (315) 19)

**His bundle automaticity**

Propafenone; 5-Hydroxypropafenone; Sinoatrial node automaticity; Atrial myocardium refractoriness; AV node refractoriness; Blood pressure; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

**Histamine H<sub>3</sub> receptor antagonist**

Histamine-*N*-methyl transferase; Acetylcholinesterase (Morisset, S. (315) R1)

**Histamine-*N*-methyl transferase**

Acetylcholinesterase; Histamine H<sub>3</sub> receptor antagonist (Morisset, S. (315) R1)

**HMG-CoA reductase inhibitor**

Balloon catheterization; Hyperplasia (Bandoh, T. (315) 37)

**5-HT<sub>1A</sub> receptor**

Blood pressure; Heart rate; Preoptic area; Forebrain; 8-OH-DPAT (*R*-(+)-8-hydroxy-2-(di-*n*-propylamino) tetralin) (Szabó, A. (315) 187)

Efficacy; Ultrasonic vocalization; Drug discrimination; (Rat) (Sánchez, C. (315) 245)

**5-HT<sub>3</sub> receptor**

Substance P; Bezold-Jarisch reflex; Capsaicin; (+)-Tibocurarine (Malinowska, B. (315) 159)

**Human bronchus**

Contraction; Protein kinase C; Na<sup>+</sup>/K<sup>+</sup>-ATPase; Ca<sup>2+</sup> channel (Yang, K.X.F. (315) 65)

**5-Hydroxypropafenone**

Propafenone; Sinoatrial node automaticity; His bundle automaticity; Atrial myocardium refractoriness; AV node refractoriness; Blood pressure; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

**Hyperplasia**

Balloon catheterization; HMG-CoA reductase inhibitor (Bandoh, T. (315) 37)

**Hypertension**

K<sup>+</sup> channel, ATP-sensitive; Myocardial hypertrophy; Trypsin; Single-channel recording (Sodder, V.H. (315) 115)

**Hypoxia**

Cell activation; Endothelium; Neutrophil adherence; Aescine; Repair (Arnould, T. (315) 227)

**Imidazoline-binding site**

Striatum; Monoamine oxidase; *Conus* venom; (Calf) (Czerwec, E. (315) 99)

**Immunohistochemistry**

Adrenomedullin; Amylin; cAMP; Mesangial cell, cultured, rat; CGRP (calcitonin gene-related peptide) (Osajima, A. (315) 319)

**Inflammation**

Pulmonary eosinophilia; Leukotriene B<sub>4</sub>; Leukotriene C<sub>4</sub>; Leukotriene D<sub>3</sub>; Leukotriene E<sub>4</sub>; Bronchoalveolar lavage fluid; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

Superoxide; Mitochondrial respiration; Shock; Endotoxin; Nitric oxide (NO) (Szabó, C. (315) 221)

**Inositol phosphate**

Endothelin; Sarafotoxin; Big endothelin-1; Spinal cord; Endothelin ET<sub>A</sub> receptor (Poulat, P. (315) 327)

**Inotropism**

Parasympathetic nervous system; Acetylcholine; Chronotropism; Heart; PACAP-38 (pituitary adenylate cyclase-activating polypeptide-38); PACAP-(6-38) (pituitary adenylate cyclase-activating polypeptide-(6-38)); (Dog) (Yonezawa, T. (315) 289)

**Inotropy**

Benzodiazepine; Diazepam; Langendorff heart;  $\text{Ca}^{2+}$ -entry blocking drug; Adenosine receptor blocking drug (Leeuwin, R.S. (315) 153)

**Intrinsic activity**

T-0509;  $\beta_1$ -Adrenoceptor agonist;  $\beta_3$ -Adrenoceptor; Adenylyl cyclase (Sato, Y. (315) 363)

**IRL 1620**

Coronary circulation; Endothelin  $\text{ET}_A$  receptor; Endothelin  $\text{ET}_B$  receptor; BQ-123; Nitric oxide (NO) (García, J.L. (315) 179)

**Kava pyrone**

Epilepsy; *Piper methysticum*;  $\text{Na}^+$  channel; Synaptosome (Gleitz, J. (315) 83)

 **$\text{K}^+$  channel, ATP-sensitive**

Hypertension; Myocardial hypertrophy; Trypsin; Single-channel recording (Sodder, V.H. (315) 115)

**KMD-3213**

$\alpha_1$ -Adrenoceptor subtype;  $\alpha_{1A}$ -Adrenoceptor; Prostate; Thoracic aorta (Yamagishi, R. (315) 73)

**Kynurenine**

Anticonvulsant; Microdialysis; Neurodegenerative disorder; Neuroprotection (Speciale, C. (315) 263)

**Langendorff heart**

Benzodiazepine; Diazepam; Inotropy;  $\text{Ca}^{2+}$ -entry blocking drug; Adenosine receptor blocking drug (Leeuwin, R.S. (315) 153)

**Leukotriene  $\text{B}_4$** 

Pulmonary eosinophilia; Inflammation; Leukotriene  $\text{C}_4$ ; Leukotriene  $\text{D}_4$ ; Leukotriene  $\text{E}_4$ ; Bronchoalveolar lavage fluid; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

**Leukotriene  $\text{C}_4$** 

Pulmonary eosinophilia; Inflammation; Leukotriene  $\text{B}_4$ ; Leukotriene  $\text{D}_4$ ; Leukotriene  $\text{E}_4$ ; Bronchoalveolar lavage fluid; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

**Leukotriene  $\text{D}_4$** 

Pulmonary eosinophilia; Inflammation; Leukotriene  $\text{B}_4$ ; Leukotriene  $\text{C}_4$ ; Leukotriene  $\text{E}_4$ ; Bronchoalveolar lavage fluid; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

**Leukotriene  $\text{E}_4$** 

Pulmonary eosinophilia; Inflammation; Leukotriene  $\text{B}_4$ ; Leukotriene  $\text{C}_4$ ; Leukotriene  $\text{D}_4$ ; Bronchoalveolar lavage fluid; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

 **$\text{Li}^+$** 

Cerebellar granule cell; Cell death; Tyrosine kinase (Grignon, S. (315) 111)

**Lipid peroxidation**

Subarachnoid hemorrhage; Endothelium-dependent relaxation; AJ-3941; Nimodipine;  $\text{Ca}^{2+}$  channel antagonist (Minato, H. (315) 297)

**Local anesthetic**

Pentacaine; Pentacaine derivative; Smooth muscle, gastric; (Guinea-pig) (Mai, M.P. (315) 305)

**Locus coeruleus**

Purinoreceptor; Pyrimidinoreceptor; Excitatory amino acid receptor; Extracellular recording (Fröhlich, R. (315) 255)

**Mesangial cell, cultured, rat**

Adrenomedullin; Amylin; cAMP; Immunohistochemistry; CGRP (calcitonin gene-related peptide) (Osajima, A. (315) 319)

**Methadone**

CRF type 1 receptor; Solution hybridization; Corticosterone; POMC (proopiomelanocortin); CRF (corticotropin-releasing factor) (Zhou, Y. (315) 31)

 **$\text{Mg}^{2+}$** 

$\beta$ -Adrenoceptor antagonist; Propranolol; S100 protein; Cardiac muscle (Nakatani, K. (315) 335)

**Microdialysis**

Dopamine;  $\beta$ -Carboline; Uptake; Striatum;  $\text{MPP}^+$  (*N*-methyl-4-phenylpyridinium) (Matsubara, K. (315) 145)

Anticonvulsant; Kynurenine; Neurodegenerative disorder; Neuroprotection (Speciale, C. (315) 263)

Nucleus accumbens; Dopamine; Ethanol; Tolerance; Animal model (Nurmi, M. (315) 277)

**Mitochondrial respiration**

Superoxide; Shock; Inflammation; Endotoxin; Nitric oxide (NO) (Szabó, C. (315) 221)

**Modulator**

Chemotherapy; Multidrug resistance; P-glycoprotein (Demmer, A. (315) 339)

**Monoamine oxidase**

Imidazole-binding site; Striatum; *Conus* venom; (Calf) (Czerwiec, E. (315) 99)

**Mononeuropathic rat**

Peripheral antinociception; Paw pressure; Systemic morphine;  $\kappa$ -Opioid receptor antagonist;  $\delta$ -Opioid receptor antagonist (Catheline, G. (315) 135)

**Motility**

Pylorus, rat; Nitric oxide (NO); VIP (vasoactive intestinal polypeptide); NANC (non-adrenergic non-cholinergic) (Willis, S. (315) 59)

**Multidrug resistance**

Chemotherapy; Modulator; P-glycoprotein (Demmer, A. (315) 339)

**Muscarinic**

Smooth muscle; Contraction; Phospholipase C; G-protein; Antibody (Cuq, P. (315) 213)

**Myenteric plexus-longitudinal muscle preparation**

Cannabinoid receptor antagonist; Cannabinoid receptor partial agonist; 6'-Cyanohept-2'-yne- $\Delta^8$ -tetrahydrocannabinol; O-823; SR141716A; Vas deferens, mouse; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

**Myocardial hypertrophy**

$\text{K}^+$  channel, ATP-sensitive; Hypertension; Trypsin; Single-channel recording (Sodder, V.H. (315) 115)

**Na<sup>+</sup> channel**

Epilepsy; Kava pyrone; *Piper methysticum*; Synaptosome (Gleitz, J. (315) 83)

**Na<sup>+</sup>/K<sup>+</sup>-ATPase**

Contraction; Human bronchus; Protein kinase C; Ca<sup>2+</sup> channel (Yang, K.X.F. (315) 65)

**Neurodegenerative disorder**

Anticonvulsant; Kynurenine; Microdialysis; Neuroprotection (Speciale, C. (315) 263)

**Neuroprotection**

Anticonvulsant; Kynurenine; Microdialysis; Neurodegenerative disorder (Speciale, C. (315) 263)

**Neutrophil adherence**

Cell activation; Hypoxia; Endothelium; Aescine; Reparil (Arnould, T. (315) 227)

**Nimodipine**

Subarachnoid hemorrhage; Endothelium-dependent relaxation; Lipid peroxidation; AJ-3941; Ca<sup>2+</sup> channel antagonist (Minato, H. (315) 297)

**Nitric oxide**

Peroxynitrite; Nitrotyrosine; Superoxide; Angiotensin II; Hemodynamics, in vivo (Kooy, N.W. (315) 165)

**Nitrotyrosine**

Peroxynitrite; Nitric oxide; Superoxide; Angiotensin II; Hemodynamics, in vivo (Kooy, N.W. (315) 165)

**Nodose ganglion**

Guanylate cyclase; Electrophysiology; Enzyme; mRNA; Nitric oxide (NO) (Lawrence, A.J. (315) 127)

**Nor-binaltorphimine dihydrochloride**

Amnesia, delayed;  $\kappa$ -Opioid receptor; Cholinergic neuronal system; Carbon monoxide (CO); U-50488H, (trans-( $\pm$ )-3,4-dichloro-*N*-methyl-*N*-(2-[1-pyrrolidinyl] cyclohexyl) benzeneacetamide methanesulfonate salt) (Hiramatsu, M. (315) 119)

**Nucleus accumbens**

Haloperidol; Clozapine; Fos-protein; Cross-tolerance; Septum, lateral (Sebens, J.B. (315) 269)

Dopamine; Ethanol; Microdialysis; Tolerance; Animal model (Nurmi, M. (315) 277)

**O-823**

Cannabinoid receptor antagonist; Cannabinoid receptor partial agonist; 6'-Cyanohe-2'-yne- $\Delta^8$ -tetrahydrocannabinol; SR141716A; Vas deferens, mouse; Myenteric plexus-longitudinal muscle preparation; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

 **$\kappa$ -Opioid receptor**

Nor-binaltorphimine dihydrochloride; Amnesia, delayed; Cholinergic neuronal system; Carbon monoxide (CO); U-50488H, (trans-( $\pm$ )-3,4-dichloro-*N*-methyl-*N*-(2-[1-pyrrolidinyl] cyclohexyl) benzeneacetamide methanesulfonate salt) (Hiramatsu, M. (315) 119)

 **$\delta$ -Opioid receptor antagonist**

Peripheral antinociception; Mononeuropathic rat; Paw pressure; Systemic morphine;  $\kappa$ -Opioid receptor antagonist (Catheline, G. (315) 135)

 **$\kappa$ -Opioid receptor antagonist**

Peripheral antinociception; Mononeuropathic rat; Paw pressure; Systemic morphine;  $\delta$ -Opioid receptor antagonist (Catheline, G. (315) 135)

**Pancreatic polypeptide**

Binding protein; Neuropeptide Y (NPY); (*Conus anemone*); Neuropeptide Y-(18-36) (Czerwiec, E. (315) 355)

**Parasympathetic nervous system**

Acetylcholine; Chronotropism; Inotropism; Heart; PACAP-38 (pituitary adenylate cyclase-activating polypeptide-38); PACAP-(6-38) (pituitary adenylate cyclase-activating polypeptide-(6-38)); (Dog) (Yonezawa, T. (315) 289)

**Passive avoidance task**

$\sigma_1$  Receptor agonist; Cognitive enhancer; Scopolamine; Basal forebrain lesion; SA4503 (1-(3,4-dimethoxyphenethyl)-4-(3-phenylpropyl)piperazine dihydrochloride); (Rat) (Senda, T. (315) 1)

**Paw pressure**

Peripheral antinociception; Mononeuropathic rat; Systemic morphine;  $\kappa$ -Opioid receptor antagonist;  $\delta$ -Opioid receptor antagonist (Catheline, G. (315) 135)

**Pentacaine**

Local anesthetic; Pentacaine derivative; Smooth muscle, gastric; (Guinea-pig) (Mai, M.P. (315) 305)

**Pentacaine derivative**

Local anesthetic; Pentacaine; Smooth muscle, gastric; (Guinea-pig) (Mai, M.P. (315) 305)

**Perfusion**

Dopamine; Placenta;  $\beta$ -Endorphin; Dynorphin; (Rat) (Stratakis, C.A. (315) 53)

**Peripheral antinociception**

Mononeuropathic rat; Paw pressure; Systemic morphine;  $\kappa$ -Opioid receptor antagonist;  $\delta$ -Opioid receptor antagonist (Catheline, G. (315) 135)

**Peroxynitrite**

Nitrotyrosine; Nitric oxide; Superoxide; Angiotensin II; Hemodynamics, in vivo (Kooy, N.W. (315) 165)

**P-glycoprotein**

Chemotherapy; Modulator; Multidrug resistance (Demmer, A. (315) 339)

**Phospholipase C**

Smooth muscle; Contraction; Muscarinic; G-protein; Antibody (Cuq, P. (315) 213)

***Piper methysticum***

Epilepsy; Kava pyrone; Na<sup>+</sup> channel; Synaptosome (Gleitz, J. (315) 83)

**Placenta**

Dopamine;  $\beta$ -Endorphin; Dynorphin; Perfusion; (Rat) (Stratakis, C.A. (315) 53)

**Platelet aggregation**

Endotoxin; Adenine nucleotide; PAF (platelet-activating factor) (Jarvis, G.E. (315) 203)

**Preoptic area**

5-HT<sub>1A</sub> receptor; Blood pressure; Heart rate; Forebrain; 8-OH-DPAT (*R*-(+)-8-hydroxy-2-(di-*n*-propylamino) tetralin) (Szabó, A. (315) 187)

**Propafenone**

5-Hydroxypropafenone; Sinoatrial node automaticity; His bundle automaticity; Atrial myocardium refractoriness; AV node refractoriness; Blood pressure; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

**Propranolol**

$\beta$ -Adrenoceptor antagonist; S100 protein; Cardiac muscle;  $Mg^{2+}$  (Nakatani, K. (315) 335)

**Prostate**

KMD-3213;  $\alpha_1$ -Adrenoceptor subtype;  $\alpha_{1a}$ -Adrenoceptor; Thoracic aorta (Yamagishi, R. (315) 73)

**Protection**

Selegiline; Astrocyte, cultured; Hippocampal cell; Excitotoxicity; Cerebral ischemia; Nerve growth factor (NGF) (Semkova, I. (315) 19)

**Protein kinase C**

Contraction; Human bronchus;  $Na^+/K^+$ -ATPase;  $Ca^{2+}$  channel (Yang, K.X.F. (315) 65)

Dopamine transporter; Dopamine uptake; WIN 35,428 binding; Arachidonic acid; Second messenger (Zhang, L. (315) 345)

**Pulmonary eosinophilia**

Inflammation; Leukotriene  $B_4$ ; Leukotriene  $C_4$ ; Leukotriene  $D_4$ ; Leukotriene  $E_4$ ; Bronchoalveolar lavage fluid; (Inbred Brown Norway rat) (Namovic, M.T. (315) 81)

**Purinoceptor**

Pyrimidinoceptor; Excitatory amino acid receptor; Locus coeruleus; Extracellular recording (Fröhlich, R. (315) 255)

**Pylorus, rat**

Motility; Nitric oxide (NO); VIP (vasoactive intestinal polypeptide); NANC (non-adrenergic non-cholinergic) (Willis, S. (315) 59)

**Pyrimidinoceptor**

Purinoceptor; Excitatory amino acid receptor; Locus coeruleus; Extracellular recording (Fröhlich, R. (315) 255)

 **$\sigma_1$  Receptor agonist**

Cognitive enhancer; Scopolamine; Basal forebrain lesion; Passive avoidance task; SA4503 (1-(3,4-dimethoxyphenethyl)-4-(3-phenylpropyl)piperazine dihydrochloride); (Rat) (Senda, T. (315) 1)

 **$\sigma$  Receptor ligand**

EMD 57445; Rimcazole; Central effect; Behavioral model (Maj, J. (315) 235)

**Reparil**

Cell activation; Hypoxia; Endothelium; Neutrophil adherence; Aescine (Arnould, T. (315) 227)

**Rimcazole**

$\sigma$  Receptor ligand; EMD 57445; Central effect; Behavioral model (Maj, J. (315) 235)

**mRNA**

Nodose ganglion; Guanylate cyclase; Electrophysiology; Enzyme; Nitric oxide (NO) (Lawrence, A.J. (315) 127)

**Sarafotoxin**

Endothelin; Big endothelin-1; Inositol phosphate; Spinal cord; Endothelin  $ET_A$  receptor (Poulat, P. (315) 327)

**Scopolamine**

$\sigma_1$  Receptor agonist; Cognitive enhancer; Basal forebrain lesion; Passive avoidance task; SA4503 (1-(3,4-dimethoxyphenethyl)-4-(3-phenylpropyl)piperazine dihydrochloride); (Rat) (Senda, T. (315) 1)

**Second messenger**

Dopamine transporter; Dopamine uptake; WIN 35,428 binding; Arachidonic acid; Protein kinase C (Zhang, L. (315) 345)

**Selegiline**

Astrocyte, cultured; Hippocampal cell; Excitotoxicity; Protection; Cerebral ischemia; Nerve growth factor (NGF) (Semkova, I. (315) 19)

**Self-administration**

Cocaine; Heart rate; Blood pressure (Ambrosio, E. (315) 43)

**Septum, lateral**

Haloperidol; Clozapine; Fos-protein; Cross-tolerance; Nucleus accumbens (Sebens, J.B. (315) 269)

**Shock**

Superoxide; Mitochondrial respiration; Inflammation; Endotoxin; Nitric oxide (NO) (Szabó, C. (315) 221)

**Single-channel recording**

$K^+$  channel, ATP-sensitive; Hypertension; Myocardial hypertrophy; Trypsin (Sodder, V.H. (315) 115)

**Sinoatrial node automaticity**

Propafenone; 5-Hydroxypropafenone; His bundle automaticity; Atrial myocardium refractoriness; AV node refractoriness; Blood pressure; (Conscious intact dog); (AV-blocked dog) (Boucher, M. (315) 171)

**Small intestine, guinea-pig**

Cannabinoid receptor antagonist; Cannabinoid receptor partial agonist; 6'-Cyanohe-2'-yne- $\Delta^8$ -tetrahydrocannabinol; O-823; SR141716A; Vas deferens, mouse; Myenteric plexus-longitudinal muscle preparation (Pertwee, R.G. (315) 195)

**Smooth muscle**

Contraction; Phospholipase C; Muscarinic; G-protein; Antibody (Cuq, P. (315) 213)

**Smooth muscle, airway**

Halothane;  $Ca^{2+}$ , intracellular;  $Ca^{2+}$  sensitivity (Kai, T. (315) 313)

**Smooth muscle, gastric**

Local anesthetic; Pentacaine; Pentacaine derivative; (Guinea-pig) (Mai, M.P. (315) 305)

**Solution hybridization**

Methadone; CRF type 1 receptor; Corticosterone; POMC (proopiomelanocortin); CRF (corticotropin-releasing factor) (Zhou, Y. (315) 31)

**Spinal cord**

Endothelin; Sarafotoxin; Big endothelin-1; Inositol phosphate; Endothelin  $ET_A$  receptor (Poulat, P. (315) 327)

**S100 protein**

$\beta$ -Adrenoceptor antagonist; Propranolol; Cardiac muscle;  $Mg^{2+}$  (Nakatani, K. (315) 335)

**SR141716A**

Cannabinoid receptor antagonist; Cannabinoid receptor partial agonist; 6'-Cyanohe-2'-yne- $\Delta^8$ -tetrahydrocannabinol; O-823; Vas deferens, mouse; Myenteric plexus-longitudinal muscle preparation; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

**Striatum**

Imidazoline-binding site; Monoamine oxidase; *Conus* venom; (Calf) (Czerwiec, E. (315) 99)

Dopamine;  $\beta$ -Carboline; Uptake; Microdialysis; MPP<sup>+</sup> (*N*-methyl-4-phenylpyridinium) (Matsubara, K. (315) 145)

#### Subarachnoid hemorrhage

Endothelium-dependent relaxation; Lipid peroxidation; AJ-3941; Nimodipine; Ca<sup>2+</sup> channel antagonist (Minato, H. (315) 297)

#### Substance P

5-HT<sub>3</sub> receptor; Bezold-Jarisch reflex; Capsaicin; (+)-Tubocurarine (Malinowska, B. (315) 159)

#### Superoxide

Peroxyntirite; Nitrotyrosine; Nitric oxide; Angiotensin II; Hemodynamics, in vivo (Kooy, N.W. (315) 165)

Mitochondrial respiration; Shock; Inflammation; Endotoxin; Nitric oxide (NO) (Szabó, C. (315) 221)

#### Synaptosome

Epilepsy; Kava pyrone; *Piper methysticum*; Na<sup>+</sup> channel (Gleitz, J. (315) 83)

#### Systemic morphine

Peripheral antinociception; Mononeuropathic rat; Paw pressure;  $\kappa$ -Opioid receptor antagonist;  $\delta$ -Opioid receptor antagonist (Catheline, G. (315) 135)

#### T-0509

$\beta_1$ -Adrenoceptor agonist;  $\beta_1$ -Adrenoceptor; Intrinsic activity; Adenylyl cyclase (Sato, Y. (315) 363)

#### Thoracic aorta

KMD-3213;  $\alpha_1$ -Adrenoceptor subtype;  $\alpha_{1a}$ -Adrenoceptor; Prostate (Yamagishi, R. (315) 73)

#### Tolerance

Nucleus accumbens; Dopamine; Ethanol; Microdialysis; Animal model (Nurmi, M. (315) 277)

#### Trypsin

K<sup>+</sup> channel, ATP-sensitive; Hypertension; Myocardial hypertrophy; Single-channel recording (Sodder, V.H. (315) 115)

#### Tyrosine kinase

Cerebellar granule cell; Cell death; Li<sup>+</sup> (Grignon, S. (315) 111)

#### Ultrasonic vocalization

5-HT<sub>1A</sub> receptor; Efficacy; Drug discrimination; (Rat) (Sánchez, C. (315) 245)

#### Uptake

Dopamine;  $\beta$ -Carboline; Striatum; Microdialysis; MPP<sup>+</sup> (*N*-methyl-4-phenylpyridinium) (Matsubara, K. (315) 145)

#### Vas deferens, mouse

Cannabinoid receptor antagonist; Cannabinoid receptor partial agonist; 6'-Cyanohex-2'-yne- $\Delta^8$ -tetrahydrocannabinol; O-823; SR141716A; Myenteric plexus-longitudinal muscle preparation; Small intestine, guinea-pig (Pertwee, R.G. (315) 195)

#### WIN 35,428 binding

Dopamine transporter; Dopamine uptake; Arachidonic acid; Protein kinase C; Second messenger (Zhang, L. (315) 345)