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Acetylcholine

GABA; GABA receptor; Spinal antinociception; Spinal pain transmission (Kommalage, M. (525) 69)

Adenylyl cyclase

Receptor signaling; G-protein; Pertussis toxin; Ligand attachment; Ligand dissociation (Sah, R. (525) 60)

α_1 -adrenoceptor

Receptor phosphorylation; Protein kinase C; Protein phosphatase; Desensitization; Phosphatidylinositol 3-kinase (Alcántara-Hernández, R. (525) 18)

Alcohol drinking behavior

Positive allosteric modulation; GABA_B receptor; CGP7930; GS39783; Baclofen; Sardinian alcohol-preferring (sP) (Rat) (Orrù, A. (525) 105)

D-Amino acid oxidase

Morphine; NMDA (N-methyl-D-aspartate) receptor; D-Serine; Serine racemase (Yoshikawa, M. (525) 94)

Aminooxyacetic acid

N-Methyl-D-aspartate receptor; Microdialysis; D-Serine; Serine racemase (Hashimoto, A. (525) 91)

Angiotensin-converting enzyme inhibitor

Kinin; Bradykinin; Insulin; Glucose; Rat uterus (Damas, J. (525) 154)

Antinociception

Fentanyl; Buprenorphine; Δ^9 -THC; Transdermal; (Guinea pig) (Cichewicz, D.L. (525) 74)

Apoptosis

Sampangine; Reactive oxygen species; Plant alkaloid; Mitochondria; Caspase (Kluza, J. (525) 32)

Manganese(II); JNK (Jun N-terminal kinase); p38 MAPK (mitogen-activated protein kinase); c-Jun; p53; p21^{WAF1/CIP1} (Suzuki, T. (525) 48)

ARL 17477

Nitrgenic neurotransmission; Fundic compliance; Neuronal nitric oxide synthase; (Pig) (Lefebvre, R.A. (525) 143)

Astragalus membranaceus

Astrapterocarpan; Platelet-derived growth factor; Vascular smooth muscle cell; Cardiovascular disease (Ohkawara, S. (525) 41)

Astrapterocarpan

Astragalus membranaceus; Platelet-derived growth factor; Vascular smooth muscle cell; Cardiovascular disease (Ohkawara, S. (525) 41)

Baclofen

Positive allosteric modulation; GABA_B receptor; CGP7930; GS39783; Alcohol drinking behavior; Sardinian alcohol-preferring (sP) (Rat) (Orrù, A. (525) 105)

Benzamide

σ_2 receptor; Radioligand binding; Breast tumor (Xu, J. (525) 8)

Bile duct ligation

Nitric oxide; Vascular reactivity; Liver cirrhosis; Methoxamine; Calcium; Thapsigargin (Atucha, N.M. (525) 117)

Bradykinin

Kinin; Insulin; Glucose; Rat uterus; Angiotensin-converting enzyme inhibitor (Damas, J. (525) 154)

Bradykinin B₁ receptor

Lipopolysaccharide; (Rat) aorta; Calcium-dependent K⁺ channel (Farias, N.C. (525) 123)

Brain injury

Transdermal patch; Physostigmine; Procyclidine; Soman; Mortality; Incapitation (Kim, W.-S. (525) 135)

Breast tumor

σ_2 receptor; Radioligand binding; Benzamide (Xu, J. (525) 8)

α -Bungarotoxin

Melatonin; Nicotinic acetylcholine receptor; Myotube culture; Cyclic AMP; Calmodulin (de Almeida-Paula, L.D. (525) 24)

Buprenorphine

Fentanyl; Δ^9 -THC; Antinociception; Transdermal; (Guinea pig) (Cichewicz, D.L. (525) 74)

Calcium

Denervation; Vas deferens; Sarco(endo)plasmic reticulum (Ca²⁺–Mg²⁺)ATPase; Plasma membrane (Ca²⁺–Mg²⁺)ATPase; Ryanodine receptor (Quintas, L.E.M. (525) 54)

Nitric oxide; Vascular reactivity; Liver cirrhosis; Methoxamine; Bile duct ligation; Thapsigargin (Atucha, N.M. (525) 117)

Calcium-dependent K⁺ channel

Bradykinin B₁ receptor; Lipopolysaccharide; (Rat) aorta (Farias, N.C. (525) 123)

Calmodulin

Melatonin; Nicotinic acetylcholine receptor; α -Bungarotoxin; Myotube culture; Cyclic AMP (de Almeida-Paula, L.D. (525) 24)

Cannabinoid CB₁ receptor

Sympathetic nervous system; P2X receptor; NESS 0327 (Tambaro, S. (525) 150)

Cardiovascular disease

Astrapterocarpan; *Astragalus membranaceus*; Platelet-derived growth factor; Vascular smooth muscle cell (Ohkawara, S. (525) 41)

Caspase

Sampangine; Apoptosis; Reactive oxygen species; Plant alkaloid; Mitochondria (Kluza, J. (525) 32)

Cerebral circulation

Signal transduction; Cyclic nucleotide; Nitric oxide (Baranov, D. (525) 112)

CGP7930

Positive allosteric modulation; GABA_B receptor; GS39783; Baclofen; Alcohol drinking behavior; Sardinian alcohol-preferring (sP) (Rat) (Orrù, A. (525) 105)

c-Jun

Manganese(II); Apoptosis; JNK (Jun N-terminal kinase); p38 MAPK (mitogen-activated protein kinase); p53; p21^{WAF1/CIP1} (Suzuki, T. (525) 48)

Compound 48/80

Sepsis; Mast cell; Neutrophil migration (Carvalho, M. (525) 161)

Cyclic AMP

Melatonin; Nicotinic acetylcholine receptor; α -Bungarotoxin; Myotube culture; Calmodulin (de Almeida-Paula, L.D. (525) 24)

Cyclic nucleotide

Cerebral circulation; Signal transduction; Nitric oxide (Baranov, D. (525) 112)

Denervation

Vas deferens; Sarco(endo)plasmic reticulum (Ca²⁺–Mg²⁺)ATPase; Plasma membrane (Ca²⁺–Mg²⁺)ATPase; Ryanodine receptor; Calcium (Quintas, L.E.M. (525) 54)

Desensitization

α_1 -adrenoceptor; Receptor phosphorylation; Protein kinase C; Protein phosphatase; Phosphatidylinositol 3-kinase (Alcántara-Hernández, R. (525) 18)

Fentanyl

Buprenorphine; Δ^9 -THC; Antinociception; Transdermal; (Guinea pig) (Cichewicz, D.L. (525) 74)

Formalin test

Pain; Opiate; Hargreaves test; Quaternary naloxone; Post-treatment (Sevostianova, N. (525) 83)

Fundic compliance

Nitrgic neurotransmission; Neuronal nitric oxide synthase; ARL 17477; (Pig) (Lefebvre, R.A. (525) 143)

GABA

GABA receptor; Acetylcholine; Spinal antinociception; Spinal pain transmission (Kommalage, M. (525) 69)

GABA receptor

GABA; Acetylcholine; Spinal antinociception; Spinal pain transmission (Kommalage, M. (525) 69)

GABA_B receptor

Positive allosteric modulation; CGP7930; GS39783; Baclofen; Alcohol drinking behavior; Sardinian alcohol-preferring (sP) (Rat) (Orrù, A. (525) 105)

Glucose

Kinin; Bradykinin; Insulin; Rat uterus; Angiotensin-converting enzyme inhibitor (Damas, J. (525) 154)

G-protein

Receptor signaling; Adenylyl cyclase; Pertussis toxin; Ligand attachment; Ligand dissociation (Sah, R. (525) 60)

GS39783

Positive allosteric modulation; GABA_B receptor; CGP7930; Baclofen; Alcohol drinking behavior; Sardinian alcohol-preferring (sP) (Rat) (Orrù, A. (525) 105)

(Guinea pig)

Fentanyl; Buprenorphine; Δ^9 -THC; Antinociception; Transdermal (Cichewicz, D.L. (525) 74)

H9c2 cardiomyocyte

KR-32570; Na⁺/H⁺ exchanger; Hypoxia1 (Kim, M.J. (525) 1)

Hargreaves test

Pain; Opiate; Formalin test; Quaternary naloxone; Post-treatment (Sevostianova, N. (525) 83)

Hypoxia1

KR-32570; Na⁺/H⁺ exchanger; H9c2 cardiomyocyte (Kim, M.J. (525) 1)

Incapacitation

Transdermal patch; Physostigmine; Procyclidine; Soman; Mortality; Brain injury (Kim, W.-S. (525) 135)

Insulin

Kinin; Bradykinin; Glucose; Rat uterus; Angiotensin-converting enzyme inhibitor (Damas, J. (525) 154)

Interpeduncular nucleus

Morphine; Naltrexone; Medial habenula; Locus coeruleus; Physical dependence (Panchal, V. (525) 98)

JNK (Jun N-terminal kinase)

Manganese(II); Apoptosis; p38 MAPK (mitogen-activated protein kinase); c-Jun; p53; p21^{WAF1/CIP1} (Suzuki, T. (525) 48)

Kinin

Bradykinin; Insulin; Glucose; Rat uterus; Angiotensin-converting enzyme inhibitor (Damas, J. (525) 154)

KR-32570

Na⁺/H⁺ exchanger; H9c2 cardiomyocyte; Hypoxia1 (Kim, M.J. (525) 1)

Ligand attachment

Receptor signaling; Adenylyl cyclase; G-protein; Pertussis toxin; Ligand dissociation (Sah, R. (525) 60)

Ligand dissociation

Receptor signaling; Adenylyl cyclase; G-protein; Pertussis toxin; Ligand attachment (Sah, R. (525) 60)

Lipopolysaccharide

Bradykinin B₁ receptor; (Rat) aorta; Calcium-dependent K⁺ channel (Farias, N.C. (525) 123)

Liver cirrhosis

Nitric oxide; Vascular reactivity; Methoxamine; Bile duct ligation; Calcium; Thapsigargin (Atucha, N.M. (525) 117)

Locus coeruleus

Morphine; Naltrexone; Medial habenula; Interpeduncular nucleus; Physical dependence (Panchal, V. (525) 98)

Manganese(II)

Apoptosis; JNK (Jun N-terminal kinase); p38 MAPK (mitogen-activated protein kinase); c-Jun; p53; p21^{WAF1/CIP1} (Suzuki, T. (525) 48)

Mast cell

Sepsis; Neutrophil migration; Compound 48/80 (Carvalho, M. (525) 161)

Medial habenula

Morphine; Naltrexone; Interpeduncular nucleus; Locus coeruleus; Physical dependence (Panchal, V. (525) 98)

Melatonin

Nicotinic acetylcholine receptor; α -Bungarotoxin; Myotube culture; Cyclic AMP; Calmodulin (de Almeida-Paula, L.D. (525) 24)

Methoxamine

Nitric oxide; Vascular reactivity; Liver cirrhosis; Bile duct ligation; Calcium; Thapsigargin (Atucha, N.M. (525) 117)

Microdialysis

Aminooxyacetic acid; *N*-Methyl-D-aspartate receptor; D-Serine; Serine racemase (Hashimoto, A. (525) 91)

Mitochondria

Sampangine; Apoptosis; Reactive oxygen species; Plant alkaloid; Caspase (Kluza, J. (525) 32)

Morphine

D-Amino acid oxidase; NMDA (*N*-methyl-D-aspartate) receptor; D-Serine; Serine racemase (Yoshikawa, M. (525) 94)

Naltrexone; Medial habenula; Interpeduncular nucleus; Locus coeruleus; Physical dependence (Panchal, V. (525) 98)

Mortality

Transdermal patch; Physostigmine; Procyclidine; Soman; Brain injury; Incapacitation (Kim, W.-S. (525) 135)

Myotube culture

Melatonin; Nicotinic acetylcholine receptor; α -Bungarotoxin; Cyclic AMP; Calmodulin (de Almeida-Paula, L.D. (525) 24)

Na⁺/H⁺ exchanger

KR-32570; H9c2 cardiomyocyte; Hypoxia1 (Kim, M.J. (525) 1)

Naltrexone

Morphine; Medial habenula; Interpeduncular nucleus; Locus coeruleus; Physical dependence (Panchal, V. (525) 98)

NESS 0327

Cannabinoid CB₁ receptor; Sympathetic nervous system; P2X receptor (Tambaro, S. (525) 150)

Neuronal nitric oxide synthase

Nitroergic neurotransmission; Fundic compliance; ARL 17477; (Pig) (Lefebvre, R.A. (525) 143)

Neutrophil migration

Sepsis; Mast cell; Compound 48/80 (Carvalho, M. (525) 161)

Nicotinic acetylcholine receptor

Melatonin; α -Bungarotoxin; Myotube culture; Cyclic AMP; Calmodulin (de Almeida-Paula, L.D. (525) 24)

Nitroergic neurotransmission

Fundic compliance; Neuronal nitric oxide synthase; ARL 17477; (Pig) (Lefebvre, R.A. (525) 143)

Nitric oxide

Cerebral circulation; Signal transduction; Cyclic nucleotide (Baranov, D. (525) 112)

Vascular reactivity; Liver cirrhosis; Methoxamine; Bile duct ligation; Calcium; Thapsigargin (Atucha, N.M. (525) 117)

NMDA (*N*-methyl-D-aspartate) receptor

D-Amino acid oxidase; Morphine; D-Serine; Serine racemase (Yoshikawa, M. (525) 94)

***N*-Methyl-D-aspartate receptor**

Aminooxyacetic acid; Microdialysis; D-Serine; Serine racemase (Hashimoto, A. (525) 91)

Opiate

Pain; Formalin test; Hargreaves test; Quaternary naloxone; Post-treatment (Sevostianova, N. (525) 83)

Organic anion transporter

Prostaglandin; Renal cortical slice; Renal proximal tubule (Nagai, J. (525) 128)

p53

Manganese(II); Apoptosis; JNK (Jun N-terminal kinase); p38 MAPK (mitogen-activated protein kinase); c-Jun; p21^{WAF1/CIP1} (Suzuki, T. (525) 48)

p38 MAPK (mitogen-activated protein kinase)

Manganese(II); Apoptosis; JNK (Jun N-terminal kinase); c-Jun; p53; p21^{WAF1/CIP1} (Suzuki, T. (525) 48)

p21^{WAF1/CIP1}

Manganese(II); Apoptosis; JNK (Jun N-terminal kinase); p38 MAPK (mitogen-activated protein kinase); c-Jun; p53 (Suzuki, T. (525) 48)

P2X receptor

Cannabinoid CB₁ receptor; Sympathetic nervous system; NESS 0327 (Tambaro, S. (525) 150)

Pain

Opiate; Formalin test; Hargreaves test; Quaternary naloxone; Post-treatment (Sevostianova, N. (525) 83)

Pertussis toxin

Receptor signaling; Adenylyl cyclase; G-protein; Ligand attachment; Ligand dissociation (Sah, R. (525) 60)

Phosphatidylinositol 3-kinase

α_1 -adrenoceptor; Receptor phosphorylation; Protein kinase C; Protein phosphatase; Desensitization (Alcántara-Hernández, R. (525) 18)

Physical dependence

Morphine; Naltrexone; Medial habenula; Interpeduncular nucleus; Locus coeruleus (Panchal, V. (525) 98)

Physostigmine

Transdermal patch; Procyclidine; Soman; Mortality; Brain injury; Incapacitation (Kim, W.-S. (525) 135)

(Pig)

Nitroergic neurotransmission; Fundic compliance; Neuronal nitric oxide synthase; ARL 17477 (Lefebvre, R.A. (525) 143)

Plant alkaloid

Sampangine; Apoptosis; Reactive oxygen species; Mitochondria; Caspase (Kluza, J. (525) 32)

Plasma membrane (Ca²⁺–Mg²⁺)ATPase

Denervation; Vas deferens; Sarco(endo)plasmic reticulum (Ca²⁺–Mg²⁺)ATPase; Ryanodine receptor; Calcium (Quintas, L.E.M. (525) 54)

Platelet-derived growth factor

Astrapterocarpan; *Astragalus membranaceus*; Vascular smooth muscle cell; Cardiovascular disease (Ohkawara, S. (525) 41)

Positive allosteric modulation

GABA_B receptor; CGP7930; GS39783; Baclofen; Alcohol drinking behavior; Sardinian alcohol-preferring (sP) (Rat) (Orrù, A. (525) 105)

Post-treatment

Pain; Opiate; Formalin test; Hargreaves test; Quaternary naloxone (Sevostianova, N. (525) 83)

Procyclidine

Transdermal patch; Physostigmine; Soman; Mortality; Brain injury; Incapacitation (Kim, W.-S. (525) 135)

Prostaglandin

Organic anion transporter; Renal cortical slice; Renal proximal tubule (Nagai, J. (525) 128)

Protein kinase C

α₁-adrenoceptor; Receptor phosphorylation; Protein phosphatase; Desensitization; Phosphatidylinositol 3-kinase (Alcántara-Hernández, R. (525) 18)

Protein phosphatase

α₁-adrenoceptor; Receptor phosphorylation; Protein kinase C; Desensitization; Phosphatidylinositol 3-kinase (Alcántara-Hernández, R. (525) 18)

Quaternary naloxone

Pain; Opiate; Formalin test; Hargreaves test; Post-treatment (Sevostianova, N. (525) 83)

Radioligand binding

σ₂ receptor; Benzamide; Breast tumor (Xu, J. (525) 8)

(Rat) aorta

Bradykinin B₁ receptor; Lipopolysaccharide; Calcium-dependent K⁺ channel (Farias, N.C. (525) 123)

Rat uterus

Kinin; Bradykinin; Insulin; Glucose; Angiotensin-converting enzyme inhibitor (Damas, J. (525) 154)

Reactive oxygen species

Sampangine; Apoptosis; Plant alkaloid; Mitochondria; Caspase (Kluza, J. (525) 32)

σ₂ receptor

Radioligand binding; Benzamide; Breast tumor (Xu, J. (525) 8)

Receptor phosphorylation

α₁-adrenoceptor; Protein kinase C; Protein phosphatase; Desensitization; Phosphatidylinositol 3-kinase (Alcántara-Hernández, R. (525) 18)

Receptor signaling

Adenylyl cyclase; G-protein; Pertussis toxin; Ligand attachment; Ligand dissociation (Sah, R. (525) 60)

Renal cortical slice

Prostaglandin; Organic anion transporter; Renal proximal tubule (Nagai, J. (525) 128)

Renal proximal tubule

Prostaglandin; Organic anion transporter; Renal cortical slice (Nagai, J. (525) 128)

Ryanodine receptor

Denervation; Vas deferens; Sarco(endo)plasmic reticulum (Ca²⁺–Mg²⁺)ATPase; Plasma membrane (Ca²⁺–Mg²⁺)ATPase; Calcium (Quintas, L.E.M. (525) 54)

Sampangine

Apoptosis; Reactive oxygen species; Plant alkaloid; Mitochondria; Caspase (Kluza, J. (525) 32)

Sarco(endo)plasmic reticulum (Ca²⁺–Mg²⁺)ATPase

Denervation; Vas deferens; Plasma membrane (Ca²⁺–Mg²⁺)ATPase; Ryanodine receptor; Calcium (Quintas, L.E.M. (525) 54)

Sardinian alcohol-preferring (sP) (Rat)

Positive allosteric modulation; GABA_B receptor; CGP7930; GS39783; Baclofen; Alcohol drinking behavior (Orrù, A. (525) 105)

Sepsis

Mast cell; Neutrophil migration; Compound 48/80 (Carvalho, M. (525) 161)

D-Serine

Aminoxyacetic acid; *N*-Methyl-D-aspartate receptor; Microdialysis; Serine racemase (Hashimoto, A. (525) 91)

D-Amino acid oxidase; Morphine; NMDA (*N*-methyl-D-aspartate) receptor; Serine racemase (Yoshikawa, M. (525) 94)

Serine racemase

Aminoxyacetic acid; *N*-Methyl-D-aspartate receptor; Microdialysis; D-Serine (Hashimoto, A. (525) 91)

D-Amino acid oxidase; Morphine; NMDA (*N*-methyl-D-aspartate) receptor; D-Serine (Yoshikawa, M. (525) 94)

Signal transduction

Cerebral circulation; Cyclic nucleotide; Nitric oxide (Baranov, D. (525) 112)

Soman

Transdermal patch; Physostigmine; Procyclidine; Mortality; Brain injury; Incapacitation (Kim, W.-S. (525) 135)

Spinal antinociception

GABA; GABA receptor; Acetylcholine; Spinal pain transmission (Kommallage, M. (525) 69)

Spinal pain transmission

GABA; GABA receptor; Acetylcholine; Spinal antinociception (Kommage, M. (525) 69)

Sympathetic nervous system

Cannabinoid CB₁ receptor; P2X receptor; NESS 0327 (Tambaro, S. (525) 150)

Thapsigargin

Nitric oxide; Vascular reactivity; Liver cirrhosis; Methoxamine; Bile duct ligation; Calcium (Atucha, N.M. (525) 117)

 Δ^9 -THC

Fentanyl; Buprenorphine; Antinociception; Transdermal; (Guinea pig) (Cichewicz, D.L. (525) 74)

Transdermal

Fentanyl; Buprenorphine; Δ^9 -THC; Antinociception; (Guinea pig) (Cichewicz, D.L. (525) 74)

Transdermal patch

Physostigmine; Procyclidine; Soman; Mortality; Brain injury; Incapacitation (Kim, W.-S. (525) 135)

Vascular smooth muscle cell

Astrapterocarpan; *Astragalus membranaceus*; Platelet-derived growth factor; Cardiovascular disease (Ohkawara, S. (525) 41)

Vas deferens

Denervation; Sarco(endo)plasmic reticulum (Ca²⁺-Mg²⁺)ATPase; Plasma membrane (Ca²⁺-Mg²⁺)ATPase; Ryanodine receptor; Calcium (Quintas, L.E.M. (525) 54)

Vascular reactivity

Nitric oxide; Liver cirrhosis; Methoxamine; Bile duct ligation; Calcium; Thapsigargin (Atucha, N.M. (525) 117)