Vasopressin Receptor

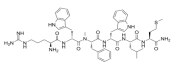
Vasopressin receptors are a family of tissue-specific G protein-coupled receptors, which classified into V1, V2 and V3 subtypes. These three subtypes differ in localization, function and signal transduction mechanisms. Although all three of these proteins are G-protein coupled receptors (GPCRs), activation of AVPR1A and AVPR1B stimulate phospholipase C, while activation of AVPR2 stimulates adenylate cyclase. These three receptors for vasopressin have unique tissue distributions. AVPR1A are expressed in vascular smooth muscle cells, hepatocytes, platelets, brain cells, and uterus cells. AVPR1B are expressed in cells of the anterior pituitary and throughout the brain, especially in the pyramidal neurons of the hippocampal CA2 field. AVPR2 are expressed in the kidney tubule, predominantly in the distal convoluted tubule and collecting ducts, in fetal lung tissue and lung cancer, the last two being associated with alternative splicing. AVPR2 is also expressed in the liver where stimulation releases a variety of clotting factors into the bloodstream.

Vasopressin Receptor Agonists & Antagonists

Antagonist G

Cat. No.: HY-P1185

Antagonist G is a potent **vasopressin** antagonist. Antagonist G is also a weak antagonist of GRP and Bradykinin. Antagonist G induces AP-1 transcription and sensitizes cells to chemotherapy.

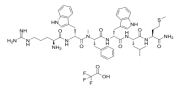


Purity: 95.00%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Antagonist G TFA

Cat. No.: HY-P1185A

Antagonist G TFA is a potent **vasopressin** antagonist. Antagonist G is also a weak antagonist of GRP and Bradykinin. Antagonist G induces AP-1 transcription and sensitizes cells to chemotherapy.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Argipressin

(Vasopressin; Arg8-vasopressin; AVP)

Cat. No.: HY-P0049

Argipressin binds to the **V1, V2, V3-vascular arginine vasopressin receptor**, with a K_d value of 1.31 nM in A7r5 rat aortic smooth muscle cells for V1.

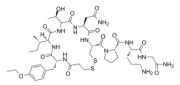
Purity: 99.82%
Clinical Data: Launched
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

Atosiban

(RW22164; RWJ22164)

Cat. No.: HY-17572

Atosiban (RW22164; RWJ22164) is a nonapeptide competitive **vasopressin/oxytocin receptor** antagonist, and is a desamino-oxytocin analogue. Atosiban is the main tocolytic agent and has the potential for spontaneous preterm labor research.



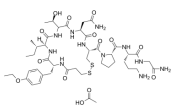
Purity: 99.09%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Atosiban acetate

(RW22164 acetate; RWJ22164 acetate)

Cat. No.: HY-17572A

Atosiban acetate (RW22164 acetate;RWJ22164 acetate) is a nonapeptide competitive **vasopressin/oxytocin receptor** antagonist, and is a desamino-oxytocin analogue. Atosiban is the main tocolytic agent and has the potential for spontaneous preterm labor research.



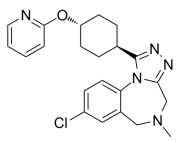
Purity: 99.92%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Balovaptan

(RG7314)

Cat. No.: HY-109024

Balovaptan (RG7314) is a highly potent and selective brain-penetrant **vasopressin 1a (hV1a) receptor** antagonist, with K_is of 1 and 39 nM for human (hV1a) and mouse (mV1a) receptors, and is used for the research of autism.



Purity: 99.18%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Big Endothelin-1 (1-38), human

Cat. No.: HY-P2538

Big Endothelin-1 (1-38), human is the precursor of endothelin-1. Endothelin-1 (ET-1) is a potent vasopressor peptide.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Big Endothelin-1 (1-39), porcine

Cat. No.: HY-P2539

Big Endothelin-1 (1-39), porcine is the precursor of endothelin-1. Endothelin-1 (ET-1) is a potent vasopressor peptide. Big Endothelin-1 (1-39), porcine has similar pressor effects in vivo.

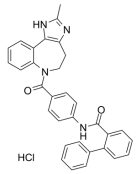
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Conivaptan hydrochloride

(YM 087)

Cat. No.: HY-18347A

Conivaptan (hydrochloride) is a non-peptide antagonist of **vasopressin receptor**, with K_i values of 0.48 and 3.04 nM for rat liver V1A receptor and rat kidney V2 receptor respectively.



Purity: 99.92%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

d[Cha4]-AVP

Cat. No.: HY-P1390

d[Cha4]-AVP is a potent and selective human **vasopressin V1B receptor** agonist (K_i values are 1.2, 151, 240 and 750 nM for V1B, V1A, Oxytocin and V2 receptors respectively). d[Cha4]-AVP stimulates ACTH and corticosterone secretion and exhibits negligible vasopressor activity in vivo.

{Mpa}YF{Cha}NCPRG-NH_2
(Disulfide bridge:Mpa_1-Cys_6)

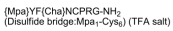
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

d[Cha4]-AVP TFA

Cat. No.: HY-P1390A

d[Cha4]-AVP TFA is a potent and selective human **vasopressin V1B receptor** agonist (K_i values are 1.2, 151, 240 and 750 nM for V1B, V1A, Oxytocin and V2 receptors respectively). d[Cha4]-AVP TFA stimulates ACTH and corticosterone secretion and exhibits negligible vasopressor activity in vivo.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

D[LEU4,LYS8]-VP

Cat. No.: HY-P1163

D[LEU4,LYS8]-VP is a selective agonist of **vasopressin V_{1b} receptor**, with the K_is of 0.16 nM, 0.52 nM, and 0.1.38 nM for rat, human and mouse V_{1b} receptor, respectively. D[LEU4,LYS8]-VP has weak antidiuretic, vasopressor, and in vitro oxytocic activities.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

D[LEU4,LYS8]-VP TFA

Cat. No.: HY-P1163A

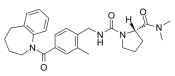
D[LEU4,LYS8]-VP TFA is a selective agonist of **vasopressin V_{1b} receptor**, with the K_is of 0.16 nM, 0.52 nM, and 0.1.38 nM for rat, human and mouse V_{1b} receptor, respectively. D[LEU4,LYS8]-VP TFA has weak antidiuretic, vasopressor, and in vitro oxytocic activities.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Fedovapagon

Cat. No.: HY-14887

Fedovapagon is a selective **vasopressin V2 receptor (V2R)** agonist with an EC_{50} of 24 nM, which is being developed for the treatment of nocturia.



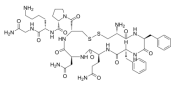
Purity: 99.03%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Felypressin

(PLV-2)

Cat. No.: HY-A0182

Felypressin (PLV-2) is a non-catecholamine vasoconstrictor and a **vasopressin 1** agonist. Felypressin is widely used in dental procedures.



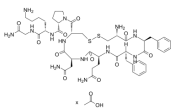
Purity: 99.68%
Clinical Data: Launched
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Felypressin acetate

(PLV-2 acetate)

Cat. No.: HY-A0182A

Felypressin acetate (PLV-2 acetate) is a non-catecholamine vasoconstrictor and a **vasopressin 1** agonist. Felypressin acetate is widely used in dental procedures.



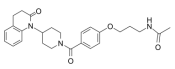
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Fuscoside

(OPC-21268)

Cat. No.: HY-15009

Fuscoside (OPC-21268) is an orally effective, nonpeptide, **vasopressin V1** receptor antagonist with an IC_{50} of 0.4 μM.

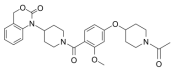


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

L-371,257

Cat. No.: HY-15010

L-371,257 is an orally bioavailable, non-blood-brain barrier penetrant, selective and competitive antagonist of **oxytocin receptor** (pA2=8.4) with high affinity at both the oxytocin receptor (K_i=19 nM) and **vasopressin V1a receptor** (K_i=3.7 nM).



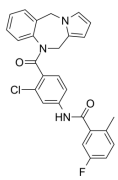
Purity: >99.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg

Lixivaptan

(VPA-985; WAY-VPA 985)

Cat. No.: HY-14185

Lixivaptan (VPA-985, WAY-VPA 985) is an orally active and selective **vasopressin receptor** V2 antagonist, with IC_{50} values of 1.2 and 2.3 nM for human and rat V2, respectively.



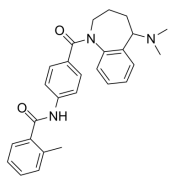
Purity: 99.90%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Mozavaptan

(OPC-31260)

Cat. No.: HY-18346

Mozavaptan (OPC-31260) is a benzazepine derivative and a potent, selective, competitive and orally active **vasopressin V_2 receptor** antagonist with an IC_{50} of 14 nM.

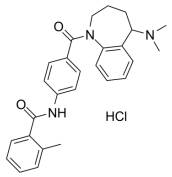


Purity: 99.89%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Mozavaptan hydrochloride

(OPC-31260 hydrochloride) Cat. No.: HY-123593

Mozavaptan hydrochloride (OPC-31260 hydrochloride) is a benzazepine derivative and a potent, selective, competitive and orally active **vasopressin V_2 receptor** antagonist with an **IC_{50}** of 14 nM.

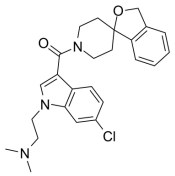


Purity: 98.16%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

RG7713

(RO5028442) Cat. No.: HY-12981

RG7713 (RO5028442) is a highly potent and selective **Brain-Penetrant Vasopressin 1a** (**V1a**) receptor antagonist with K_is of 1 nM (**hV1a**) and 39 nM (**mV1a**).

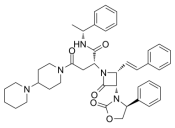


Purity: 99.79%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

SRX246

Cat. No.: HY-105685

SRX246 is a potent, CNS-penetrant, highly selective, orally bioavailable **vasopressin 1a (V1a) receptor** antagonist (K_i=0.3 nM for human V1a). SRX246 has no interaction at V1b and V2 receptors.

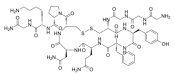


Purity: 99.69%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Terlipressin

Cat. No.: HY-12554

Terlipressin is a vasopressin analogue with potent vasoactive properties. Terlipressin is a highly selective **vasopressin V1 receptor** agonist that reduces the splanchnic blood flow and portal pressure and controls acute variceal bleeding.

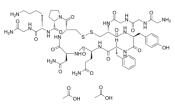


Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

Terlipressin acetate

Cat. No.: HY-12554A

Terlipressin acetate is a vasopressin analogue with potent vasoactive properties. Terlipressin acetate is a highly selective **vasopressin V1 receptor** agonist that reduces the splanchnic blood flow and portal pressure and controls acute variceal bleeding.

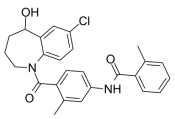


Purity: 99.76%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

Tolvaptan

(OPC-41061) Cat. No.: HY-17000

Tolvaptan is a selective, competitive arginine vasopressin receptor 2 antagonist with an IC50 of 1.28μM for the inhibition of AVP-induced platelet aggregation.

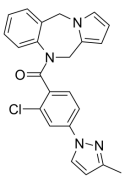


Purity: 99.92%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg

WAY-151932

(VNA-932; WAY-VNA 932) Cat. No.: HY-19381

WAY-151932 is a **vasopressin V_2-receptor** agonist with **IC_{50}** of 80.3 nM and 778 nM in human-V_2 binding and V_{1a} binding assay.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg