

mAChR

Muscarinic acetylcholine receptor

mAChRs (muscarinic acetylcholine receptors) are acetylcholine receptors that form G protein-receptor complexes in the cell membranes of certainneurons and other cells. They play several roles, including acting as the main end-receptor stimulated by acetylcholine released from postganglionic fibersin the parasympathetic nervous system. mAChRs are named as such because they are more sensitive to muscarine than to nicotine. Their counterparts are nicotinic acetylcholine receptors (nAChRs), receptor ion channels that are also important in the autonomic nervous system. Many drugs and other substances (for example pilocarpineand scopolamine) manipulate these two distinct receptors by acting as selective agonists or antagonists. Acetylcholine (ACh) is a neurotransmitter found extensively in the brain and the autonomic ganglia.

mAChR Inhibitors, Agonists, Antagonists, Activators & Modulators



(±)-Darifenacin-d4 ((±)-UK-88525-d4) Cat.	(±)-Darifenacin-d4 hydrobromide No.: HY-22437S ((±)-UK-88525-d4 hydrobromide) Cat. No.: HY-22437S1
(±)-Darifenacin-d4 is deuterium labeled (±)-Darifenacin. (±)-Darifenacin is the racemate of Darifenacin. Darifenacin is a selective M3 muscarinic receptor antagonist.	$(\pm)-Darifenacin-d4 (hydrobromide) is deuterium labeled (\pm)-Darifenacin. (\pm)-Darifenacin is the racemate of Darifenacin. Darifenacin is a selective M3 muscarinic receptor antagonist.$
Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg
(±)-Muscarine chloride	4-DAMP No.: HY-139126 (4-DAMP methiodide) Cat. No.: HY-100958
(±)-Muscarine chloride is the racemate of Muscarine chloride. Muscarine is a prototype muscarinic acetylcholine receptor agonist.	4-DAMP is a potent antagonist of M3 receptor and also has a high affinity for the closely-related M5 receptor.
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	Cl ⁻ Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg
5-Hydroxymethyl Tolterodine-d14 (formate)	AC260584 lo.: HY-76570S1 Cat. No.: HY-100336
5-Hydroxymethyl Tolterodine-d14 (formate) is deuterium labeled (Rac)-5-Hydroxymethyl Tolterodine. о ^{он} н	AC260584 is an M1 muscarinic receptor allosteric agonist with a pEC _{s0} of 7.6. P_{D} P_{D} $P_{$
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	Purity: 99.25% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg
Aceclidine (Quinuclidin-3-yl acetate) Cat	Aclidinium Bromide . No.: HY-32067 (LAS 34273; LAS-W 330) Cat. No.: HY-14144
Aceclidine is a modulator of M3 muscarinic acetylcholine receptor. Aceclidine is a cycloplegic agent, a surfactant, a tonicity adjustor and optionally a viscosity enhancer and an antioxidant.	Aclidinium Bromide (LAS 34273; LAS-W 330) is a long-acting, inhaled muscarinic antagonist. Aclidinium Bromide has the potential for chronic obstructive pulmonary disease (COPD) research.
Purity:>98%Clinical Data:No Development ReportedSize:100 mg, 500 mg	Purity: 98.08% Image: Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg 100 mg
AF-DX 384 Cat.	Alvameline No.: HY-107652 (Lu 25-109) Cat. No.: HY-101586
AF-DX 384 is a selective antagonist of M2 and M4 muscarinic acetylcholine receptors (K _s =6.03 and 10 nM, respectively). AF-DX 384 reverses deficits in novel object recognition and passive avoidance in aged rats, as well as in young rats with impairments induced by scopolamine. Purity: >98%	Alvameline (Lu25-109) is a partial M1 agonist and M2/M3 antagonist.
Clinical Data:No Development ReportedSize:1 mg, 5 mg	Clinical Data: No Development Reported Size: 1 mg, 5 mg



Atropine		Atropine methyl bromide	
(Tropine tropate; DL-Hyoscyamine)	Cat. No.: HY-B1205	(Methylatropine bromide)	Cat. No.: HY-112076
Atropine (Tropine tropate) is a competitive muscarinic acetylcholine receptor (mAChR) antagonist, with anti-myopia effect. Atropine blocks the inhibitory effect of ACh on heart rate and contractility, potentially also leading to tachyarrhythmias. Purity: 99.55% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg	- М - о С - ОН	Atropine methyl bromide, a muscarinic receptor (mAChR) antagonist, is a quaternary ammonium salt of atropine and a mydriatic for dilation of the pupil during ophthalmic examination. It is introduced for relieving pyloric spasm in infants for its highly polar nature. Purity: ≥95.0% Clinical Data: Launched Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg	
Atropine sulfate (Tropine tropate sulfate; DL-Hyoscyan	nine	Atropine sulfate monohydrate (Tropine tropate sulf	fate
sulfate; Sulfatropinol)	Cat. No.: HY-B1205A	monohydrate; DL-Hyoscyamine sulfate monohydrate)	Cat. No.: HY-B0394
Atropine (Tropine tropate) sulfate is a broad-spectrum and competitive muscarinic acetylcholine receptor (mAChR) antagonist.	<u>П</u> 0 0.5H ₂ SO ₄	Atropine (Tropine tropate) sulfate monohydrate is a broad-spectrum and competitive muscarinic acetylcholine receptor (mAChR) antagonist with anti-myopia effect.	-(+)-0-0-0H 12 H0-0-0H OH 12 H20
Purity: 98.07%		Purity: 99.62%	
Size: 100 mg		Size: 10 mM × 1 mL 100 mg	
Atropino de		Patofontoral	
(Troning tronate-d5: DL-Hyoscyaming-d5)	Cat No . HV P02045	(GSK961081: TD-5959)	
	Cat. No HT-D03543		Cat. NO.: H1-12560
Atropine-d5 (Tropine tropate-d5) is the deuterium labeled Atropine (sulfate monohydrate). Atropine (Tropine tropate) sulfate monohydrate is a broad-spectrum and competitive muscarinic acetylcholine receptor (mAChR) antagonist with anti-myopia effect. Purity: > 98% (linical Date: No Development Reported		Batefenterol (GSK961081;TD-5959) is a novel muscarinic receptor antagonist and β_2 -adrenoceptor agonist; displays high affinity for hM2, hM3 muscarinic and $h\beta_2$ -adrenoceptor with K_1 values of 1.4, 1.3 and 3.7 nM, respectively. Purity: 98.08% Glipical Date: Phase 3	
Size: 1 mg, 5 mg		Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg	
Benzamide Derivative 1	Cat. No.: HY-U00415	Benzetimide hydrochloride (R4929)	Cat. No. : HY-B1547A
Benzamide Derivative 1 is a benzamide derivative from patent EP0213775A1, compound 18. Benzamide Derivative 1 may be useful in treatment of gastrointestinal disorders.		Benzetimide hydrochloride is a muscarinic acetylcholine receptor antagonist. Target: mAChR.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:99.44%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 10 mg, 50 mg	O H-CI
Benztropine mesylate (Benzatropine mesylate; Benzo	tropine	Benztropine-13C,d3 mesylate	
mesyiate; Benztropine methanesulfonate)	Cat. No.: HY-B0520A		Cat. No.: HY-B0520AS
Benztropine mesylate (Benzatropine mesylate) is an orally active centrally acting anticholinergic agent that can be used for Parkinson's disease research. Benztropine mesylate is an anti-histamine agent and a dopamine re-uptake inhibitor.		Benztropine-13C,d3 (mesylate) is the 13C- and deuterium labeled. Benztropine mesylate (Benzatropine mesylate) is an orally active centrally acting anticholinergic agent that can be used for Parkinson's disease research.	
Purity: 99.86%	° ° ∣	Purity: >98%	O O O
Clinical Data: Launched		Clinical Data:	
512C. 10 IIIIVI × 1 IIIL, 500 IIIQ, 1 Q		512C. 1 HIG, 5 HIG	

Beperidium iodide		Bethanechol	
(SX 810)	Cat. No.: HY-100152	(Carbamyl-β-methylcholine)	Cat. No.: HY-B0406
Beperidium iodide shows a competitive antagonistic effect against acetylcholine receptor with a pA2 of 7.93.		Bethanechol (Carbamyl- β -methylcholine), a parasympathomimetic agent, is a mAChR agonist that exerts its effects via directly stimulating the mAChR (M1, M2, M3, M4, and M5) of the parasympathetic nervous system.	
Purity:99.79%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg		Purity:>98%Clinical Data:LaunchedSize:500 mg	
Bethanechol chloride		Bethanechol-d6 chloride	
(Carbamyl-β-methylcholine chloride)	Cat. No.: HY-B0406A	(Carbamyl-β-methylcholine-d6 chloride)	Cat. No.: HY-B0406AS
Bethanechol chloride (Carbamyl-β-methylcholine chloride), a parasympathomimetic agent, is a mAChR agonist that exerts its effects via directly stimulating the mAChR (M1, M2, M3, M4, and M5) of the parasympathetic nervous system.		Bethanechol-d6 (Carbamyl-β-methylcholine-d6) chloride is the deuterium labeled Bethanechol chloride.	$ \begin{array}{c} 0 \\ H_2 N \\ \end{array} \begin{array}{c} 0 \\ H_2 N \\ \end{array} \begin{array}{c} 0 \\ 0 \\ \end{array} \begin{array}{c} 0 \\ H_2 \\$
Purity:≥95.0%Clinical Data:LaunchedSize:10 mM × 1 mL, 200 mg, 5 g		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	
Discuides		Dis seiden hades sklastid	
Biperiden (KL 373)	Cat. No : HV-13204A	Biperiden nydrochloride	
Biperiden(KL 373) is an antiparkinsonian agent, which is the selective central M1 cholinoreceptors blocker. Target: M1 receptors Biperiden is an antiparkinsonian agent of the anticholinergic type.		Biperiden Hydrochloride (KL 373 Hydrochloride) is an antiparkinsonian agent, which is the selective central M1 cholinoreceptors blocker. Target: M1 receptors Biperiden is an antiparkinsonian agent of the anticholinergic type.	
Purity:>98%Clinical Data:LaunchedSize:1 mg, 5 mg		Purity: >98% Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg	
Riperiden-d5 hydrochloride		Blarcamosino	
(KL 373-d5 hydrochloride)	Cat. No.: HY-13204S	blateameshe	Cat. No.: HY-105296
Biperiden-d5 (KL 373-d5) hydrochloride is the deuterium labeled Biperiden hydrochloride. Biperiden (KL 373) hydrochloride is an antiparkinsonian agent, which is the selective central M1 cholinoreceptors blocker. Purity: >98% Clinical Data: No Development Reported Size: 1 mg. 5 mg		Blarcamesine is an orally bioavailable Sigma-1 receptor agonist and muscarinic receptor modulator, with anticonvulsant, anti-amnesic, neuroprotective and antidepressant properties. Blarcamesine ameliorates neurologic impairments in a mouse model of Rett syndrome. Purity: >98% Clinical Data: Phase 2 Size: 1 mo. 5 mo	
BQCA	Cat. No.: HY-101858	BTM-1086	Cat. No.: HY-U00406
BQCA a highly selective allosteric modulator of the M1 mAChR .	N O OH	BTM-1086 is a potent anti-ulcer and gastric secretory inhibiting agent.	
Purity:98.59%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 1	00 mg	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	

Camylofine	Cat. No.: HY-B1230	CDD0102 (CDD0102A)	Cat. No.: HY-U00230
Camylofin is an antimuscarinic, is a smooth muscle relaxant.		CDD0102 is a potent M ₁ Muscarinic receptor agonist.	N N N
Purity:>98%Clinical Data:LaunchedSize:1 mg, 5 mg		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	H
Cevimeline (AF102B)	Cat. No.: HY-70020	Cevimeline hydrochloride (AF102B hydrochloride)	Cat. No. : HY-70020B
Cevimeline (AF-102B) is a quinuclidine derivative of acetylcholine and a selective and orally active muscarinic M1 and M3 receptor agonist. Cevimeline stimulates secretion by the salivary glands and can be used as a sialogogue for xerostomia.	S S	Cevimeline hydrochloride (AF102B hydrochloride) is a quinuclidine derivative of acetylcholine and a selective and orally active muscarinic M1 and M3 receptor agonist.	N HIGH
Purity: >98% Clinical Data: Launched Size: 5 mg, 10 mg	Ν	Purity: $\geq 98.0\%$ Clinical Data:LaunchedSize:10 mM × 1 mL, 5 mg, 10 mg, 50 mg	HCI
Cevimeline hydrochloride hemihydrate (SNI-2011; AF102B hydrochloride hemihydrate)	Cat. No.: HY-76772	Cevimeline-d4 hydrochloride (AF102B-d4 hydrochloride)	Cat. No.: HY-70020BS
Cevimeline hydrochloride hemihydrate (SNI-2011) is a quinuclidine derivative of acetylcholine and a selective and orally active muscarinic M1 and M3 receptor agonist. Purity: ≥98.0% Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg	H-Cl 0.5 H ₂ O Relative Stereochemistry	Cevimeline-d4 (AF102B-d4) hydrochloride is the deuterium labeled Cevimeline hydrochloride. Cevimeline hydrochloride (AF102B hydrochloride) is a quinuclidine derivative of acetylcholine and a selective and orally active muscarinic M1 and M3 receptor agonist. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	
CHF5407	Cat. No.: HY-U00302	Choline bitartrate	Cat. No. : HY-101036
CHF5407 is a selective, long-acting and competitive muscarinic M3 receptor antagonist. CHF5407 shows subnanomolar affinities for human muscarinic M1 (hM1), M2 (hM2) and M3 (hM3) receptors. CHF5407 shows a prolonged antibronchospastic activity.	S C C C C C C C C C C C C C C C C C C C	Choline bitartrate is a vitamin-like essential nutrient , can affect diseases such as liver disease, atherosclerosis and neurological disorders.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	Br F	Purity: ≥99.0% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg	HO
Cimetropium Bromide (DA-3177)	Cat. No.: HY-U00106	Clidinium bromide (Ro 2-3773)	Cat. No.: HY-B1132
Cimetropium Bromide (DA-3177) is a mAChR antagonist for long-term treatment of irritable bowel syndrome.		Clidinium bromide is a quaternary amine antimuscarinic agent. Clidinium bromide may help symptoms of cramping and abdominal/stomach pain by decreasing stomach acid, and slowing the intestines in vivo.	
Purity: 96.19% Clinical Data: Launched Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 20 mg	Br	Purity: ≥98.0% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg	N [™] Br

Clidinium-D5 bromide (Ro 2-3773-D5)	Cat. No.: HY-B1132S	Cyclobuxine D	Cat. No.: HY-N4080
Clidinium-D5 bromide (Ro 2-3773-D5) is the deuterium labeled Clidinium bromide. Clidinium bromide is a quaternary amine antimuscarinic agent. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg		Cyclobuxine D is a steroidal alkaloid extracted from Buxus microphylla. Cyclobuxine D has a significant bradycardic effect in the rat heart and an inhibitory action on acetylcholine and Ba**-induced contraction of the longitudinal muscle isolated from the rabbit jejunum. Purity: >98% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 25 mg	
Cyclodrine hydrochloride	Cat. No.: HY-U00139	Cyclopentolate hydrochloride (DL-Cyclopentolate hydrochloride)	Cat. No.: HY-B1621A
Cyclodrine hydrochloride is a cholinergic (muscarinic, nicotinic) (mAChR and nAChR) receptor antagonist.	H-CI	Cyclopentolate (DL-Cyclopentolate) hydrochloride is an Atropine-like muscarinic receptors antagonist with a pK_{B} value of 7.8 (on the circular ciliary muscle). Cyclopentolate hydrochloride is an anti-muscarinic agent commonly used in the ophthalmologic practice.	H-CI
Size: 1 mg, 5 mg		Clinical Data: Launched Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg	
Dennersia		Devilence in	
Darenzepine	Cat. No.: HY-100154	(UK-88525)	Cat. No.: HY-A0033
Darenzepine is a muscarinic receptor inhibitor extracted from patent US 20170095465 A1.	HN-C	Darifenacin(UK88525) is a selective M3 muscarinic receptor antagonist with pKi of 8.9.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	N N	Purity:>98%Clinical Data:LaunchedSize:5 mg	
Darifenacin hydrobromide (UK-88525 hydrobromide)	Cat. No.: HY-A0012	Deschloroclozapine	Cat. No.: HY-42110
Darifenacin hydrobromide (UK-88525 hydrobromide) is a selective M3 muscarinic receptor antagonist with pKi of 8.9.		Deschloroclozapine, a metabolite of Clozapine, is a highly potent muscarinic DREADDs agonist. Deschloroclozapine binds to DREADD receptor subtypes hM3Dq and hM4Di with K_i of 6.3 and 4.2 nM, respectively.	
Purity: 98.28% Clinical Data: Launched Size: 10 mM × 1 mL, 10 mg, 100 mg		Purity:99.79%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 10 mg, 50 mg, 100 mg	N N H
Desfesoterodine (PNU-200577; 5-Hydroxymethyl Tolterodine)	Cat. No.: HY-76569	Dexetimide ((+)-Benzetimide; (S)-(+)-Dexetimide; Dexbenzetimide)	Cat. No .: HY-105545
Desfesoterodine (PNU-200577) is a potent and selective muscarinic receptor (mAChR) antagonist with a K_{B} and a pA_{2} of 0.84 nM and 9.14, respectively.		Dexetimide ((+)-Benzetimide) is a high-affinity muscarinic receptor antagonist and a potent and persistent anticholinergic agent used to treat neuroleptic-induced parkinsonism.	
Purity: 99.58% Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg	ОН	Purity:99.20%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 10 mg, 50 mg	

Dicyclomine hydrochloride		Diphenidol hydrochloride	
(Dicycloverine hydrochloride)	Cat. No.: HY-B1339	(Difenidol hydrochloride)	Cat. No.: HY-A0082
Dicyclomine hydrochloride is a potent and orally active muscarinic cholinergic receptors antagonist.		Diphenidol hydrochloride (Difenidol hydrochloride) is a non-selective muscarinic $M_1 - M_4$ receptor antagonist, has anti-arrhythmic activity. Diphenidol hydrochloride is also a potent non-specific blocker of voltage-gated ion channels (Na ⁺ , K ⁺ , and Ca ²⁺) in neuronal cells.	
Purity: 99.32%		Purity: 99.0%	
Clinical Data: Launched		Clinical Data: Launched	
Size. 10 milli × 1 mL, 100 mg, 250 mg, 500 mg		Size. 10 milli × 1 mil, 100 mg	
Diphenmanil methylsulfate		DREADD agonist 21	
(Diphemanil mesylate)	Cat. No.: HY-16171		Cat. No.: HY-100234
Diphemanil methylsulfate is a quaternary ammonium anticholinergic. It binds muscarinic acetycholine receptors and thereby decreases secretory excretion of stomach acids as well as saliva and sweat.	N ⁺ -	DREADD agonist 21 is a potent human muscarinic acetylcholine M3 receptors (hM3Dq) agonist (EC _{so} =1.7 nM).	
	0-s=0 0-		
Purity: 99.83%	-	Purity: 98.95%	\sim H \sim
Size: 10 mM × 1 mL, 10 mg, 50 mg		Size: $10 \text{ mM} \times 1 \text{ mL}, 2 \text{ mg}, 5 \text{ mg}, 10 \text{ mg}$	
DREADD agonist 21 dihydrochloride		Dronedarone	
	Cat. No.: HY-100234A	(SR 33589)	Cat. No.: HY-A0016
DREADD agonist 21 dihydrochloride is a potent human muscarinic acetylcholine M3 receptors (hM3Dq) agonist (EC _{so} =1.7 nM).		Dronedarone (SR 33589), a derivative of amiodarone (HY-14187), is a class III antiarrhythmic agent for the study of atrial fibrillation (AF) and atrial flutter.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	Provide the second seco	Purity:99.81%Clinical Data:LaunchedSize:10 mM × 1 mL, 10 mg, 50 mg) \
Dronedarone D6 hydrochloride		Flucaine	
Dioneau one Do nyaroemonae	Cat. No.: HY-A0016S	Liacante	Cat. No.: HY-101743
Dronedarone D6 hydrochloride is the deuterium labeled Dronedarone. Dronedarone hydrochloride, a derivative of Amiodarone (HY-14187), is a class III antiarrhythmic agent for the study of atrial fibrillation (AF) and atrial flutter.		Elucaine is a muscarinic acetylcholine receptor antagonist with anti-ulcerative activity.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:>98%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 50 mg	
Emraclidine (CVL-231)	Cat. No.: HY-132812	ENS-163 phosphate (ENS 213-163; Sandoz ENS 163 p Thiopilocarpine phosphate)	hosphate; Cat. No.: HY-U00038
Emraclidine (CVL-231) is a muscarinic M4 receptor positive allosteric modulator (WO2018002760, compound 11). Emraclidine can be used for the research of neurological diseases.		ENS-163 phosphate is a selective muscarinic M1 receptor agonist.	и м м но-р-он он
Purity:99.87%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	N=





Irsogladine maleate		Isopteropodine	
(Dicloguamine maleate; MN1695)	Cat. No.: HY-B0327A		Cat. No.: HY-N4157
Irsogladine is a PDE4 inhibitor and muscarinic acetylcholine receptor binder.Purity:>98%Clinical Data:LaunchedSize:1 mg, 5 mg	$\begin{array}{c} \begin{array}{c} & & \\ & & \\ C \\ & \\ & \\ & \\ & \\ & \\ H \\ & \\ & \\ H \\ & \\ &$	Isopteropodine is heteroyohimbine-type oxindolealkaloid components of Uncaria tomentosa(Willd.) DC. Isopteropodine acts as positivemodulators of muscarinic M1 and 5-HT2receptors.Purity:98.66%Clinical Data:No Development ReportedSize:5 mg	
JHU37152	Cat. No.: HY-131891	JHU37160	Cat. No.: HY-131881
JHU37152 is a potent and brain-penetrant DREADD agonist, with EC ₅₀ s of 5nM and 0.5nM for hM3Dq and hM4Di DREADDs in HEK-293 cells, respectively. Purity: 98.75% Clinical Data: No Development Reported		JHU37160 is a potent and brain-penetrant DREADD agonist, with EC ₅₀ s of 18.5nM and 0.2nM for hM3Dq and hM4Di DREADDs in HEK-293 cells, respectively. Purity: 99.83% Clinical Data: No Development Reported	
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 10	0 mg	Size: 10 mix × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 1	ou mg
L Hyercyamine		L Hypergramine culfete	
(Daturine)	Cat No HY-N0471	(Daturine sulfate)	Cat No: HY-N0471A
L-Hyoscyamine (Daturine), a natural plant tropane alkaloid, is a potent and competitive muscarinic receptor (MR) antagonist. L-Hyoscyamine is a levo-isomer to Atropine (HY-B1205). Purity: 99.80% Clinical Data: Launched Size: 10 mM × 1 mL 100 mg	O O O O O O O O O O O O O O O O O O O	L-Hyoscyamine sulfate (Daturine sulfate), a natural plant tropane alkaloid, is a potent and competitive muscarinic receptor (MR) antagonist. L-Hyoscyamine sulfate is a levo-isomer to Atropine (HY-B1205). Purity: >98% Clinical Data: Launched Size: 5 mg. 10 mg. 20 mg	O O O O O O O O O O O O O O
L-Hyoscyamine-d3 (Daturine-d3)	Cat. No.: HY-N0471S	Levetimide	Cat. No.: HY-105545A
L-Hyoscyamine-d3 (Daturine-d3) is the deuterium labeled L-Hyoscyamine. L-Hyoscyamine (Daturine), a natural plant tropane alkaloid, is a potent and competitive muscarinic receptor (MR) antagonist. L-Hyoscyamine is a levo-isomer to Atropine (HY-B1205). Purity: >98%		Levetimide is a potent and stereoselective inhibitor of [³ H](+)pentazocine binding, with a K _i of 2.2 nM. Purity: 99.18%	
Clinical Data: No Development Reported Size: 1 mg. 5 mg		Clinical Data: No Development Reported Size: 10 mM × 1 mL 10 mg. 50 mg	
_		10 mg, 50 mg	
LY2119620	Cat. No.: HY-15885	LY2119620-d3	Cat. No.: HY-15885S
LY2119620 is a high-affinity muscarinic M ₂ /M ₄ receptor agonist.		LY2119620-d3 is the deuterium labeled LY2119620. LY2119620 is a high-affinity muscarinic M_2/M_4 receptor agonist.	
Purity:99.74%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 10	0 mg	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	

LY320135	Cat No : HV-W011040	mAChR-IN-1	Cat No : HV-12426
LY320135 is a potent and selective antagonist of CB1 receptor, with a K, of 141 nM. LY320135 also binds to 5-HT2 and muscarinic receptors with K,s of 6.4 μ M and 2.1 μ M, respectively. LY320135 exhibits neuroprotective effect.Purity:>98% Clinical Data: No Development Reported Size:1 mg, 5 mg		mAChR-IN-1 is a potent muscarinic cholinergic receptor (mAChR) antagonist, with an IC ₅₀ of 17 nM. Purity: 99.78% Clinical Data: No Development Reported Size: 1 mg, 5 mg	
mAChR-IN-1 hydrochloride	Cat. No.: HY-12426A	Mazaticol	Cat. No. : HY-105793
mAChR-IN-1 hydrochloride is a potent muscarinic cholinergic receptor (mAChR) antagonist, with an IC ₅₀ of 17 nM. Purity: 99.94% Clinical Data: No Development Reported	N H-CI	Mazaticol is an anticholinergic agent. Mazaticol blocks the muscarinic acetylcholine receptors and cholinergic nerve activity. Mazaticol is a potent 3H-QNB and 3H-PZ binding inhibitor, can bind to the M2 receptors with high affinity. Purity: >98% Clinical Data: No Development Reported Size: 1 May 5 may	O V V V V O V O V O V O V O V O V O V O
		512e. 1 mg, 5 mg	
McN-A-343	Cat. No.: HY-107648	Methacholine chloride (Acetyl-β-methylcholine chloride)	Cat. No.: HY-A0083
McN-A-343 is a selective M1 muscarinic agonist that stimulates muscarinic transmission in sympathetic ganglia. McN-A-343 reduces inflammation and oxidative stress in an experimental model of ulcerative colitis.		Methacholine (Acetyl-β-methylcholine) chloride acts a muscarinic M3 receptor agonist in the parasympathetic nervous system. Methacholine chloride acts directly on acetylcholine receptors on smooth muscle causing contraction and airway narrowing.	
Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg		Purity: ≥98.0% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg	
Methoctramine tetrahydrochloride	Cat. No.: HY-116294A	Methylbenactyzium Bromide	Cat. No.: HY-B2070
Methoctramine tetrahydrochloride is a potent and cardioselectivity antagonist of M2 muscarinic receptor . Methoctramine tetrahydrochloride can inhibit Muscarine-induced bradycardia in vivo.	Q	Methylbenactyzium Bromide is a muscarinic acetylcholine receptor (mAChR) inhibitor.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity: >98.0% Clinical Data: Launched Size: 10 mM × 1 mL, 50 mg, 100 mg, 200 mg	
Metixene hydrochloride	Cat. No .: HY-120081B	Metixene hydrochloride hydrate	Cat. No.: HY-120081A
Metixene hydrochloride is an anticholinergic antiparkinsonian agent, potently inhibits binding of quinuclidinyl benzilate (QNB) to the muscarinic receptor in rat brain cortical tissue, with an IC _{so} of 55 nM and a K _d of 15 nM.	H-CI	Metixene hydrochloride hydrate is an anticholinergic antiparkinsonian agent, potently inhibits binding of quinuclidinyl benzilate (QNB) to the muscarinic receptor in rat brain cortical tissue, with an IC_{so} of 55 nM and a K_d of 15 nM.	N_ S
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity: 99.97% Clinical Data: Launched Size: 10 mM × 1 mL, 10 mg	HCI H ₂ O





Otilonium-d4 bromide	Cat No HV-R0499AS1	Oxitropium Bromide	Cat No. HY-U00105
Otilonium-d4 (bromide) is deuterium labeled Otilonium (bromide).		Oxitropium bromide is an mAChR antagonist used as an anticholinergic bronchodilator drug for the treatment of asthma and chronic obstructive pulmonary disease.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:>98%Clinical Data:LaunchedSize:1 mg, 5 mg	Br
Oxotremorine M iodide	Cat. No.: HY-101372A	Oxotremorine sesquifumarate	Cat. No.: HY-101239
Oxotremorine M iodide is a potent and non-selective muscarinic acetylcholine receptor (mAChR) agonist. Oxotremorine M iodide potentiates NMDA receptors by muscarinic receptor dependent and independent mechanisms.		Oxotremorine sesquifumarate is a mAChR agonist that mainly activates M2 receptors. Oxotremorine sesquifumarate can be used for neurological research.	
Purity: ≥98.0% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg		Purity:≥98.0%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg	0 O
Oxybutynin	Cat. No.: HY-B0267	Oxybutynin chloride	Cat. No.: HY-B0267A
Oxybutynin is an anticholinergic agent, which inhibits vascular K, channels in a concentration-dependent manner, with an IC ₅₀ of 11.51 μ M.	OH N	Oxybutynin chloride is an anticholinergic agent, which inhibits vascular K_v channels in a concentration-dependent manner, with an IC _{so} of 11.51 μ M.	OH N
Purity:99.55%Clinical Data:LaunchedSize:10 mM × 1 mL, 100 mg, 500 mg		Purity: 98.31% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg, 500 mg	
Oxybutynin-d11 chloride	Cat. No.: HY-B0267AS	PCS1055 dihydrochloride	Cat. No.: HY-122203
Oxybutynin-d11 chloride is the deuterium labeled Oxybutynin chloride. Oxybutynin chloride is an anticholinergic agent, which inhibits vascular K_v channels in a concentration-dependent manner, with an IC ₅₀ of 11.51 μ M.Purity:>98% Clinical Data: No Development Reported Size:1mg, 5 mg, 10 mg, 25 mg		PCS1055 dihydrochloride is a potent, selective and competitive muscarinic M4 receptor antagonist with an IC ₅₀ of 18.1 nM and a K _d of 5.72 nM. PCS1055 dihydrochloride inhibits radioligand [³ H]-NMS binding to the M4 receptor with a K _t of 6.5 nM. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	
PD 102807		PDE4-IN-4	C-1 No UV 115071
PD 102807 is a M4 muscarinic receptor antagonist with an IC_{so} of 90.7 nM. PD 102807 inhibits M1, M2, M3, M5 muscarinic receptor with IC_{so} of 6558.7, 3440.7, 950.0, and 7411.7 nM, respectively. Antidyskinetic effect.		PDE4-IN-4 is a dual M3 (pIC ₅₀ = 10.2) antagonist-PDE4 (pIC ₅₀ = 8.8) inhibitor for the inhaled treatment of pulmonary diseases.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	~

Peimisine		Peimisine hydrochloride	
(Ebeiensine)	Cat. No.: HY-N0214	(Ebeiensine hydrochloride)	Cat. No.: HY-N0214A
Peimisine (Ebeiensine) non-competitively antagonizes tracheal smooth muscle muscarinic M receptor and inhibits smooth muscle contraction caused by Ach.	H H H H H O	Peimisine (Ebeiensine) hydrochloride non-competitively antagonizes tracheal smooth muscle muscarinic M receptor and inhibits smooth muscle contraction caused by Ach.	H -CI
Purity:99.51%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg		Purity:>98%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg	
Developing budgesblegide		Devleying	
(Peneguining hydrochloride)	Cat No : HV 127076	(MP_11)	Cat. No : HV 110220
	Cat. No.: HY-13/9/6		Cat. No.: HY-110239
Penehyclidine (Penequinine) hydrochloride, a anticholinergic drug, is a selective antagonist of M1 and M3 receptors. Penehyclidine hydrochloride activates NF-kβ in lung tissue and inhibits the release of inflammatory factors.		Perlapine is a potent muscarinic DREADD (Designer Receptors Exclusively Activated by Designer Drugs) agonist Perlapine exhibits >10000-fold selectivity for hM ₃ D _q over hM ₃ receptors.	
Purity: ≥ 99.0% Clinical Data: No Development Reported Size: 1 mg, 5 mg	H-CI	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	
Phenglutarimid		Pilocarpine Hydrochloride	
(Ciba 10870; Phenglutarimide)	Cat. No.: HY-U00001		Cat. No.: HY-B0726
Phenglutarimid is an anticholinergic used as an antiparkinsonian agent.		Pilocarpine Hydrochloride is a potent M3-type muscarinic acetylcholine receptor (M3 muscarinic receptor) agonist.	O O N
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:99.94%Clinical Data:LaunchedSize:100 mg, 500 mg	HCI
Dilacornina nitrata		Dilacornina d2 hydrochlarida	
Photarphie intrate		Phocarphie-ds hydrochlonde	Cat No + HV P07265
Pilocarpine nitrate is a potent M3-type muscarinic acetylcholine receptor (M3 muscarinic receptor) agonist.	$(1,1,1,1) \xrightarrow{(1,1,1)} (1,1,1) ($	Pilocarpine-d3 (hydrochloride) is deuterium labeled Pilocarpine (Hydrochloride). Pilocarpine Hydrochloride is a potent M3-type muscarinic acetylcholine receptor (M3 muscarinic receptor) agonist.	
Purity:>98%Clinical Data:LaunchedSize:1 mg, 5 mg	ОН	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	
Piperidolate	Cat. No.: HY-B0962A	Piperidolate hydrochloride	Cat. No.: HY-B0962
Piperidolate is an antimuscarinic, inhibits intestinal cramp induced by acetylcholine (rats and dogs).		Piperidolate hydrochloride is an antimuscarinic, inhibits intestinal cramp induced by acetylcholine (rats and dogs).	
Purity: 99.34% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg, 200 mg	, o ,	Purity: 99.90% Clinical Data: Launched Size: 10 mM × 1 mL, 100 mg, 200 mg	H-CI



vas Facatavadina d14 funanzta		De coniec domine	
rac Fesoterodine-d14 fumarate	Cat. No.: HY-70053S	Racanisodamine	Cat. No.: HY-N2064
(Rac)-Fesoterodine-d14 fumarate is a labelled racemic Fesoterodine. Fesoterodine is an orally active, nonsubtype selective, competitive muscarinic receptor (mACNR) antagonist with pK , values of 8.0, 7.7, 7.4, 7.3, 7.5 for M1, M2, M3, M4, M5 receptors, respectively. Purity: >98% Clinical Data: Size: 1 mg, 10 mg		Racanisodamine is one of the racemic isomers of anisodamine, resembles anisodamine in pharmacological effect. Racanisodamine is a non-selective muscarinic antagonist, used as a component of eye drops for myopic control.Purity:98.67% Clinical Data: Launched Size:98.67 mm, 100 mg, 500 mg	HOOH
Rapacuronium bromide (Org 9487)	Cat. No.: HY-16423	rel-Biperiden EP impurity A-d5	Cat. No.: HY-13204S2
Rapacuronium bromide (Org 9487), a non-depolarizing neuromuscular blocker, is an allosteric modulator of muscarinic acetylcholine receptor (mAChR).		rel-Biperiden EP impurity A-d5 is deuterium labeled Biperiden (hydrochloride).	
Purity: ≥98.0% Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 1	Br 00 mg	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	H H
rel-Biperiden EP impurity B-d5	C-4 No. (1)/ 1220452	rel-Biperiden-d5	C-+ N UV 1220451
rel-Biperiden EP impurity B-d5 is deuterium labeled Biperiden (hydrochloride).		rel-Biperiden-d5 is deuterium labeled Biperiden (hydrochloride).	$\begin{array}{c} D \\ D \\ D \\ HO_{N_{0}} \end{array} $
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	H H	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	N N
Revefenacin		RHC 80267	
(TD-4208; GSK1160724)	Cat. No.: HY-15851	(U-57908)	Cat. No.: HY-107416
Revefenacin (TD-4208; GSK1160724) is a potent mAChR antagonist; has a high affinity on M3 receptor with a K_i of 0.18 nM.	Gundand	RHC 80267 (U-57908) is a potent and selective inhibitor of diacylglycerol lipase (DAGL) (with IC_{50} of 4 μ M in canine platelets). RHC-80267 inhibits cholinesterase activity with an IC_{50} of 4 μ M, thereby enhancing the relaxation evoked by acetylcholine .	Oshof Hoursel
Purity: 99.78% Clinical Data: Launched Size: 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg		Purity:99.51%Clinical Data:No Development ReportedSize:10 mg, 25 mg, 50 mg, 100 mg	
Rispenzepine	Cat. No.: HY-U00030	Sabcomeline (SB-202026; Memric)	Cat. No.: HY-106432
Rispenzepine is a novel antimuscarinic compound with a preferential action at $\rm M_1$, and $\rm M_3$ receptor subtypes.	HN N N N	Sabcomeline (SB-202026) is a potent and functionally selective muscarinic M1 receptor partial agonist that improve cognition. Sabcomeline can be used for Alzheimer's disease research.	N ^O N
Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	



Talsaclidine	C + N - UV 120055	Tarafenacin	C + N - UV 14025
Talsaclidine is a muscarinic agonist with preferential neuron-stimulating properties.Talsaclidine is a full agonist at the M1 subtype, and as a partial agonist at the M2 and M3 subtypes.Purity: $\geq 98.0\%$ Clinical Data:No Development Reported Size:10 mM × 1 mL, 1 mg, 5 mg		(SV1-40776) Tarafenacin(SVT-40776) is a highly selective M3 muscarinic receptor antagonist (Ki = 0.19 nM), ~200 fold selectivity over M2 receptor. IC50 value: 0.19 nM (Ki) Target: M3 muscarinic receptor in vitro: SVT-40776 is highly selective for M(3) over M(2) receptors (Ki = 0.19 nmol. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	$ \begin{array}{c} F \\ () \\ N \end{array} \\ 0 \\ \end{array} $
Tarafenacin D-tartrate (SVT-40776 D-tartrate)	Cat. No.: HY-14825A	ТВРВ	Cat. No.: HY-14562
Tarafenacin D-tartrate (SVT-40776 D-tartrate) is a highly selective M3 muscarinic receptor antagonist (Ki= 0.19 nM), ~200 fold selectivity over M2 receptor.		TBPB is an allosteric M1 mAChR agonist(EC50=289 nM) that regulates amyloid processing and produces antipsychotic-like activity in rats.	HAN CN CN C
Purity: 99.87% Clinical Data: Phase 2 Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg	но с он	Purity: 99.68% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg	
Telenzepine dihydrochloride	Cat. No.: HY-B1789A	Tematropium (CDDD3602; HGP6)	Cat. No.: HY-U00203
Telenzepine dihydrochloride is a selective and orally active muscarinic M1 receptor antagonist with a K _i of 0.94 nM. Telenzepine dihydrochloride inhibits gastric acid secretion and has antiulcer effects. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg		Tematropium (CDDD3602) is a soft anticholinergics. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	
Temiverine hydrochloride	Cat. No.: HY-U00055	Terodiline	Cat. No.: HY-16489
Temiverine hydrochloride is a synthesized drug that is expected to have anticholinergic action. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	HO HO H-CI	Terodiline is an M1-selective muscarinic receptor (mAChR) antagonist with K _b s of 15, 160, 280, and 198 nM in rabbit vas deferens (M1), atria (M2), bladder (M3) and ileal muscle (M3), respectively. Terodiline also is a Ca ²⁺ blocker. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	HNX
Terodiline hydrochloride	Cat. No.: HY-16489A	Thiochrome	Cat. No.: HY-N7247
Terodiline hydrochloride is an M1-selective muscarinic receptor (mAChR) antagonist with K_bs of 15, 160, 280, and 198 nM in rabbit vas deferens (M1), atria (M2), bladder (M3) and ileal muscle (M3), respectively. Terodiline hydrochloride also is a Ca ²⁺ blocker.	HN	Thiochrome, a natural oxidation product and metabolite of thiamine, is a selective M4 muscarinic receptor of acetylcholine (ACh) affinity enhancer. Thiochrome has neutral cooperativity with ACh at M1 to M3 receptors.	N N N OH
Purity:99.78%Clinical Data:No Development ReportedSize:5 mg	H-CI	Purity: ≥99.0% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg	



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Tropicamide		Trospium chloride	
(Ro 1-7683)	Cat. No.: HY-B0321		Cat. No.: HY-B0461
Tropicamide (Ro 1-7683) is a selective M4 muscarinic acetylcholine receptor antagonist. Tropicamide produces short acting mydriasis (dilation of the pupil) and cycloplegia when applied as eye drops.		Trospium chloride is an orally active, specific and competitive antagonist of muscarinic cholinergic receptors (mAChRs) , with antimuscarinic activity.	N ⁺ Cr H O O O O O O O H
Purity:99.30%Clinical Data:LaunchedSize:10 mM × 1 mL, 100 mg, 500 mg	0	Purity:99.32%Clinical Data:LaunchedSize:10 mM × 1 mL, 100 mg	\bigcirc
Trospium-d8 chloride	Cat. No.: HY-B0461S	Umeclidinium bromide (GSK573719A)	Cat. No.: HY-12100
Trospium-d8 chloride is the deuterium labeled Trospium chloride. Trospium chloride is an orally active, specific and competitive antagonist of muscarinic cholinergic receptors (mAChRs) , with antimuscarinic activity.		Umeclidinium bromide is a novel mAChR antagonist. The affinity (K _i) of Umeclidinium bromide for the cloned human M1-M5 mAChRs ranges from 0.05 to 0.16 nM.	С Ч Вr
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity: 99.72% Clinical Data: Launched Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg	\bigcirc
Umeclidinium-d10 bromide (GSK573719A-d10)	Cat. No.: HY-1210051	Umeclidinium-d5 bromide (GSK573719A-d5)	Cat. No.: HY-12100S
Umeclidinium-d10 bromide (GSK573719A-d10) is the deuterium labeled Umeclidinium bromide. Umeclidinium bromide is a novel mAChR antagonist. The affinity (K) of Umeclidinium bromide for the cloned human M1-M5 mAChRs ranges from 0.05 to 0.16 nM. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg		Umeclidinium-d5 bromide (GSK573719A-d5) is the deuterium labeled Umeclidinium bromide. Umeclidinium bromide is a novel mAChR antagonist. The affinity (K) of Umeclidinium bromide for the cloned human M1-M5 mAChRs ranges from 0.05 to 0.16 nM. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	
Velutenacin		Vinconate	
Velufenacin is a muscarinic receptor antagonist. .		Vinconate is an indolonaphthyridine derivative and can stimulate the muscariic acetylcholine receptor.	
Purity:99.46%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	
VU 0238429	Cat. No.: HY-12157	VU 0255035 (VU 255035)	Cat. No .: HY-108234
VU 0238429 is positive allosteric modulator of muscarinic acetylcholine receptor subtype 5 (mAChR5 or M5), with an EC ₅₀ of 1.16 μ M.		VU 0255035 is a highly selective, competitive and brain penetrant muscarinic M1 receptor antagonist with an IC_{so} of 130 nM. VU 0255035 reduces pilocarpine-induced seizures in mice. VU0255035 is used to examine the role of the M1 receptor in diverse situations.	
Purity:99.99%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg,	100 mg	Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	
	www.MedCh	emExpress.com	23

VU 0365114	Cat. No. : HY-107651	VU 6008667	Cat. No.: HY-101281
VU 0365114 is a <code>mAChR M_s</code> positive allosteric modulator, with an EC_{s0} of 2.7 $\mu\text{M}.$		VU 6008667 is a selective negative allosteric modulator of MS NAM with IC_{50} s of 1.2 μ M and 1.6 μ M for human M5 and rat M5, respectively. High CNS penetration.	
Purity: 99.51% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg		Purity: 99.05% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 10	0 00 mg
VU0119498	Cat. No.: HY-114933	VU0152099	Cat. No.: HY-119226
VU0119498 is a pan G _q mAChR M1, M3, M5 positive allosteric modulator (PAM), with $EC_{50}s$ of 6.04, 6.38, and 4.08 µM, respectively. VU0119498 has antidiabetic activity.	Br N = 0	VU0152099 is a potent, selective and brain-penetrant mAChR M4 positive allosteric modulator with an EC_{s0} of 0.4 µM for rat M4 receptor. VU0152099 is inactive for other mAChR subtypes or other GPCRs.	$- \bigvee_{N=0}^{N+1} \bigvee_{0}^{N+1} \bigvee_{0}^{N+2} $
Purity: 99.52% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg	0	Purity:98.35%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg	
VU0152100 (VU152100)	Cat. No.: HY-13340	VU0238441	Cat. No.: HY-12158
VU0152100 is a potent and selective allosteric potentiator of M4 mAChR with an EC50 of 380 \pm 93 nM.	NH2 N S HN	VU0238441 is a pan muscarinic acetylcholine receptor (mAChR) positive allosteric modulator (PAM) with EC _{so} s of 3.2 μ M, 2.8 μ M, 2.2 μ M, 2.1 μ M, >10 μ M for M1, M2, M3, M5 and M4, respectively.	CI F F F
Purity:99.88%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 10 mg, 50 mg	`o	Purity: ≥97.0% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 10	ö 00 mg
VU0357017 hydrochloride (CID-25010775)	Cat. No.: HY-19752A	VU0453595	Cat. No.: HY-120023
VU0357017 hydrochloride (CID-25010775) is a potent, selective and brain-penetrant allosteric agonist of M_1 muscarinic acetylcholine receptor, with an EC_{s0} of 477 nM.	Cyty Con	VU0453595 is a highly selective, systemically active M_1 positive allosteric modulator (PAM, EC _{so} =2140nM) for the research of schizophrenia.	F-
Purity: 99.28% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg		Purity:99.42%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg	< N
VU0455691	Cat. No.: HY-116569	VU0467154	Cat. No.: HY-112209
VU0455691 is a potent, selective orthosteric M_1 mAChR antagonist (pIC_{s0}=6.64; IC_{s0}=0.23 \ \mu M for hM1).		VU0467154 is a positive allosteric modulator of the M4 muscarinic acetylcholine receptor (mAChR), potentiating the response to ACh with pEC _{so} s of 7.75, 6.2 and 6 for rat, human and cynomolgus monkey M4 receptor, respectively.	F O O NH
Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	Ń	Purity: 99.59% Clinical Data: No Development Reported Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 10	o [″] `s⊸ [™] N ^{,™} 00 mg

VU0467485 (AZ13713945)	Cat. No.: HY-120184	VU10010	Cat. No.: HY-14563
VU0467485 (AZ13713945) is a potent, selective, and orally bioavailable muscarinic acetylcholine receptor 4 (M4) positive allosteric modulator (PAM).		VU10010 is a potent, highly selective and allosteric M_4 mAChR potentiator with an EC_{so} of 400 nM. VU10010 binds to an allosteric site on M_4 mAChR and increases affinity for acetylcholine and coupling to G proteins.	NH2 NH2
Purity:99.37%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg	U S N	Purity:98.70%Clinical Data:No Development ReportedSize:10 mg, 25 mg, 50 mg	Ċ
VU6000918	Cat No : HY-139044	VU6005806 (AZN-00016130)	Cat. No : HY-128584
VU6000918 is a muscarinic acetylcholine (M4) positive allosteric modulator, with an EC_{50} of 19 nM for hM4.		VU6005806 (AZN-00016130) is a potent muscarnic acethylcholine receptor subtype 4 (M_4) positive allosteric modulator (PAM), with EC _{so} s of 94 nM, 28 nM, 87 nM and 68 nM for human, rat, dog and cyno M ₄ , respectively. Used in the research of neuropsychiatric disorders.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	
W-84 dibromide		WIN 64338 hydrochloride	
(HDMPPA)	Cat. No.: HY-100979		Cat. No.: HY-101368A
W-84 (dibromide) is a potent allosteric modulator of M2-cholinoceptors , which retards [³ H]N-methylscopolamine dissociation. W-84 dibromide can stabilize cholinergic antagonist-receptor complexes.	ý,~,*~~,*~,°,°	WIN 64338 hydrochloride is a potent, selective, nonpeptide competitive antagonist of bradykinin B2 receptor . WIN 64338 hydrochloride inhibits [³ H]-Bradykinin binding to the bradykinin B2 receptor on human IMR-90 cells with a K _i of 64 nM.	
Purity:98.04%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg		Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	HCI
Xanomeline (LY-246708)	Cat. No.: HY-105182	Xanomeline oxalate (LY246708 oxalate)	Cat. No.: HY-13410
Xanomeline, as an effective and selective muscarinic type 1 and type 4 (M1/M4) receptor agonist, increases neuronal excitability. Xanomeline can be used for the research of neurological disorders, such as schizophrenia.	s'N N=Co	Xanomeline oxalate (LY246708 oxalate) is a potent and selective muscarinic receptor agonist (SMRA) and stimulates phosphoinositide hydrolysis in vivo. Xanomeline oxalate can be used for the research of Alzheimer's disease.	
Purity:99.32%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg		Purity: 99.89% Clinical Data: Phase 2 Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg	0
Xanomeline tartrate		YM-46303	
(LY 246708 tartrate)	Cat. No.: HY-105182A		Cat. No.: HY-U00104
Xanomeline (LY 246708) is the potent agonist of muscarinic M1/M4 receptor with antipsychotic-like activity. Xanomeline (LY 246708) increases neuronal excitability. Xanomeline (LY 246708) can be used for the research of schizophrenia.		YM-46303 is an mAChR antagonist which exhibits the highest affinities for M1 and M3 receptors, and selectivity for M3 over M2 receptor.	H-CI
Purity:99.92%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg, 50 mg, 100 mg	п 1 оп о он	Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	

YM-58790	Cat. No. : HY-101679	Zamifenacin (UK-76654)	Cat. No.: HY-123337
YM-58790 is a potent antagonist of M3 muscarinic receptor, with K_i of 15 nM.	C H C N C N	Zamifenacin (UK-76654) is a potent gut-selective muscarinic M3 receptor antagonist. Zamifenacin significantly reduces colonic motility in irritable bowel syndrome.	
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:99.74%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg	, 100 mg
Zamifenacin fumarate		[D-Trn7 9 10]-Substance P TFA	
(UK-76654 fumarate)	Cat. No.: HY-107649		Cat. No.: HY-P1375A
Zamifenacin fumarate (UK-76654 fumarate) is a potent gut-selective muscarinic M3 receptor antagonist. Zamifenacin significantly reduces colonic motility in irritable bowel syndrome.	Contraction Contraction Holes of Holes	[D-Trp7,9,10]-Substance P TFA is a substance P analogue. Substance P stimulates substance P receptors but also inhibits ion conductance through nicotinic acetylcholine receptors.	RPKPQQWFWWM-NH2 (TFA sali)
Purity: 99.77% Clinical Data: No Development Reported Size: 10 mM x 1 ml 5 mg 10 mg 25 mg 50 mg 1	00 mg	Purity: >98% Clinical Data: No Development Reported	