Sodium Channel

Na channels; Na+ channels

Sodium channels are integral membrane proteins that form ion channels, conducting sodium ions (Na+) through a cell’s plasma membrane. They are classified according to the trigger that opens the channel for such ions, i.e. either a voltage-change (Voltage-gated, voltage-sensitive, or voltage-dependent sodium channel also called VGSCs or Nav channel) or a binding of a substance (a ligand) to the channel (ligand-gated sodium channels). In excitable cells such as neurons, myocytes, and certain types of glia, sodium channels are responsible for the rising phase of action potentials. Voltage-gated Na+ channels can exist in any of three distinct states: deactivated (closed), activated (open), or inactivated (closed). Ligand-gated sodium channels are activated by binding of a ligand instead of a change in membrane potential.
**Sodium Channel Inhibitors & Modulators**

**(+)-Kavain**  
**Bioactivity:** (+)-Kavain, a main kavalactone extracted from *Piper methysticum*, has anticonvulsive properties, attenuating vascular smooth muscle contraction through interactions with voltage-dependent Na⁺ and Ca²⁺ channels. (+)-Kavain is a selective Nav1.8 sodium channel blocker with an IC₅₀ of 8 nM; over 100-fold more selective vs. human Nav1.2, 1.3, 1.5 and 1.7.

**Purity:** 99.98%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg  
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**(-)-Sparteine sulfate pentahydrate**  
**Bioactivity:** (-)-Sparteine sulfate pentahydrate is a class 1a antiarrhythmic agent and a sodium channel blocker. It is an alkaloid, can chelate the bivalents calcium and magnesium.

**Purity:** 98.0%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 50 mg  
---

**Ajmaline**  
**Bioactivity:** Ajmaline is an alkaloid that is class 1a antiarrhythmic agent.

**Purity:** 99.31%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO, 10 mg, 50 mg, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg  
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**AM-2099**  
**Bioactivity:** AM-2099 is a potent and selective inhibitor of voltage-gated sodium channel Nav1.7 with an IC₅₀ of 0.16 μM for human Nav1.7.

**Purity:** 98.0%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg  
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**Amiloride hydrochloride**  
**Bioactivity:** Amiloride (hydrochloride) is an epithelial sodium channel (ENaC) inhibitor and a competitive inhibitor of Urokinase-type plasminogen activator (uPA).

**Purity:** 98.0%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg  
---

**Amiloride hydrochloride dihydrate**  
**Bioactivity:** Amiloride hydrochloride dihydrate is an inhibitor of both Epithelial sodium channel (ENaC) and urokinase-type plasminogen activator receptor (uTPA).

**Purity:** 98.56%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg  
---

**Amitriptyline hydrochloride**  
**Bioactivity:** Amitriptyline Hydrochloride is a dibenzocycloheptene-derivative tricyclic antidepressant (TCA).

**Purity:** 99.64%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in Water, 1 g, 5 g  
---

**Benzamil hydrochloride**  
**Bioactivity:** Benzamil hydrochloride is a specific blocker of sodium channel (ENaC).

**Purity:** 99.46%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg  
---
**Benzocaine**

**Cat. No.: HY-Y0258**

**Bioactivity:** Benzocaine shares a common receptor with all other local anesthetics (LA) in the voltage-gated Na⁺ channel, with an IC₅₀ of 0.8 mM tested with a potential of +30 mV.

**Purity:** 99.98%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 5 g, 10 g

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**Bulleyaconitine A**

**Cat. No.: HY-N0239**

**Bioactivity:** Bulleyaconitine A is an analgesic and antiinflammatory drug isolated from Aconitum plants; has several potential targets, including voltage-gated Na⁺ channels.

**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 10 mg, 50 mg

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**Carbamazepine**

(CBZ; NSC 169864)

**Cat. No.: HY-B0246**

**Bioactivity:** Carbamazepine, a sodium channel blocker, is an anticonvulsant drug. Target: Sodium channel Carbamazepine inhibits the binding of [3H]batrachotoxinin A 20-α-benzoate (BTX-B) to a receptor site of voltage-sensitive sodium channel with IC50 of 131 μM, to decrease the activation of sodium channel ion flux...

**Purity:** 99.35%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg

---

**Cariporide**

(HOE-642)

**Cat. No.: HY-19693**

**Bioactivity:** Cariporide (HOE-642) is a selective Na⁺/H⁺ exchange inhibitor.

**Purity:** 98.57%
**Clinical Data:** No Development Reported
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

---

**Chlorpromazine D6 hydrochloride**

**Cat. No.: HY-B0407AS**

**Bioactivity:** Chlorpromazine D6 hydrochloride is the deuterium labeled Chlorpromazine. Chlorpromazine is an inhibitor of dopamine receptor, 5-HT receptor, potassium channel, sodium channel.

**Purity:** 99.0%
**Clinical Data:** No Development Reported
**Size:** 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

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**Chlorpromazine hydrochloride**

**Cat. No.: HY-B0407A**

**Bioactivity:** Chlorpromazine Hydrochloride is an antagonist of the dopamine D2, 5HT2A, potassium channel and sodium channel. Chlorpromazine binds with D2 and 5HT2A with Kᵢ of 363 nM and 8.3 nM, respectively.

**Purity:** 99.83%
**Clinical Data:** Launched
**Size:** 1 g, 5 g

---

**Dibucaine**

(Cinchocaine)

**Cat. No.: HY-B0552**

**Bioactivity:** Dibucaine is a local anesthetic of the amide type now generally used for surface anesthesia.

**Purity:** 99.81%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 5 g, 10 g

---

**Dibucaine hydrochloride**

(Cinchocaine hydrochloride)

**Cat. No.: HY-B0552A**

**Bioactivity:** Dibucaine Hydrochloride is a local anesthetic of the amide type now generally used for surface anesthesia.

**Purity:** 99.67%
**Clinical Data:** No Development Reported
**Size:** 10mM x 1mL in DMSO, 5 g, 10 g

---

**Dyclonine hydrochloride**

**Cat. No.: HY-B0364A**

**Bioactivity:** Dyclonine is an oral anaesthetic found in Sucrets, an over the counter throat lozenge.

**Purity:** 99.72%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 5 g, 10 g

---

**EIPA**

(L593754; MH 12-43; Ethylisopropylamiloride)

**Cat. No.: HY-101840**

**Bioactivity:** EIPA is a TRPP3 channel inhibitor with an IC₅₀ of 10.5 μM. EIPA also inhibits Na⁺/H⁺-exchanger (NHE) and macropinocytosis.

**Purity:** 99.73%
**Clinical Data:** No Development Reported
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg
Bioactivity: Eleclazine hydrochloride is a novel late Na+ current inhibitor with IC50 value of 0.7 μM.

Purity: 99.47%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Bioactivity: Eniporide hydrochloride (EMD-96785 hydrochloride) is a potent Na+/H+ exchange inhibitor.

Purity: 99.31%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

Bioactivity: Eslicarbazepine acetate, an antiepileptic drug, is a dual inhibitor of β-Secretase and voltage-gated sodium channel.

Purity: 99.48%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Bioactivity: Flecainide (Tambocor) is a class 1C antiarrhythmic drug especially used for the management of supraventricular arrhythmia; works by blocking the Nav1.5 sodium channel in the heart, causing prolongation of the cardiac action potential. IC50 Value: Target: Nav1.5 channel Flecainide is a class 1C...

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg

Bioactivity: Funapide (TV 45070; XEN402) is a potent Sodium Channel inhibitor. Nav1.7

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

Bioactivity: Ginsenoside Rg3 is the main component of Red ginseng. Ginsenoside Rg3 inhibits Na+ and hKv1.4 channel with IC50 of 32.2±4.5 and 32.6±2.2 μM, respectively. Ginsenoside Rg3 also inhibits Aβ levels, NF-κB activity, and COX-2<...

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

Bioactivity: GNE-131 is a potent and selective inhibitor of human sodium channel NaV1.7, with an IC50 of 3 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Bioactivity: GS967 (GS-458967) is a potent, and selective inhibitor of cardiac late sodium current (late $I_{Na}^*$) with IC50 $values of$ 0.13 and 0.21 μM for ventricular myocytes and isolated hearts, respectively.

Purity: 99.96%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

Bioactivity: ICA-121431 is a nanomolar potent small molecule Nav1.7 channel inhibitor with IC50 of 19 nM for rat Nav1.7, but no inhibition on human, monkey and dog Nav1.7.

Purity: 98.29%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg
Lamotrigine (LTG; BW430C)  
**Cat. No.: HY-B0495**

**Bioactivity:** Lamotrigine (BW430C) is a novel anticonvulsant drug for inhibition of 5-HT and sodium channel Target: Sodium Channel. Lamotrigine stabilises presynaptic neuronal membranes by blockade of voltage-dependent sodium channels, thus preventing the release of excitatory neurotransmitters, particularly...

**Purity:** 99.94%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 1 g, 5 g

---

Lidocaine (Lignocaine)  
**Cat. No.: HY-B0185**

**Bioactivity:** Lidocaine, an amide local anesthetic, has anti-inflammatory properties in vitro and in vivo, possibly due to an attenuation of pro-inflammatory cytokines, intracellular adhesion molecule-1 (ICAM-1), and reduction of neutrophils influx.

**Purity:** 99.52%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 5 g, 10 g

---

Lidocaine hydrochloride (Lignocaine hydrochloride)  
**Cat. No.: HY-B0185A**

**Bioactivity:** Lidocaine HCl salt, an amide local anesthetic, has anti-inflammatory properties in vitro and in vivo, possibly due to an attenuation of pro-inflammatory cytokines, intracellular adhesion molecule-1 (ICAM-1), and reduction of neutrophils influx.

**Purity:** 99.95%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in Water, 5 g, 10 g

---

Mepivacaine hydrochloride  
**Cat. No.: HY-B0185A**

**Bioactivity:** Mepivacaine is a tertiary amine used as a local anesthetic.

**Purity:** 99.83%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 1 g, 5 g

---

Meticrane  
**Cat. No.: HY-B0908**

**Bioactivity:** Meticrane is a diuretic. Meticrane inhibits the reabsorption of sodium and chloride ions in the distal convoluted tubule. Meticrane is used to treat essential hypertension.

**Purity:** 98.79%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 100 mg

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Mexiletine hydrochloride (KOE-1173 (hydrochloride))  
**Cat. No.: HY-A0093**

**Bioactivity:** Mexiletine (hydrochloride) (KOE-1173 (hydrochloride)) is a non-selective voltage-gated sodium channel blocker; Class IB anti-arrhythmic compound.

**Purity:** 99.96%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg

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Moricizine (Moracizine)  
**Cat. No.: HY-B0615**

**Bioactivity:** Moricizine is an antiarrhythmia agent used primarily for ventricular rhythm disturbances.

**Purity:** >98%

**Clinical Data:** Launched

**Size:** 10 mg, 50 mg, 100 mg

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Myomodulin  
**Cat. No.: HY-P0268**

**Bioactivity:** Myomodulin is a neuropeptide present in molluscs, insects, and gastropods.

**Purity:** >98%

**Clinical Data:** No Development Reported

**Size:** 1 mg, 5 mg, 10 mg

---

Nav1.7 inhibitor  
**Cat. No.: HY-13985**

**Bioactivity:** Nav1.7 inhibitor is a potent Nav1.7 inhibitor. IC50 value: Target: Nav1.7 Preparation of sulfonamide derivatives as Nav1.7 inhibitors By Brown, Alan Daniel; Rawson, David James; Storer, Robert Ian; Swain, Nigel Alan From PCT Int. Appl. (2012), WO 2012007868 A2 20120119.

**Purity:** 98.81%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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Nav1.7-IN-2  
**Cat. No.: HY-19366**

**Bioactivity:** Nav1.7-IN-2 is an inhibitor of voltage-gated sodium channels (Nav), in particular Nav 1.7, with IC50 of 80 nM.

**Purity:** >98%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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<table>
<thead>
<tr>
<th>Compound</th>
<th>Cat. No.</th>
<th>Bioactivity</th>
<th>Purity</th>
<th>Clinical Data</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nav1.7-IN-3</strong></td>
<td>HY-101789</td>
<td>Nav1.7-IN-3 is a selective, orally bioavailable voltage-gated sodium channel Nav1.7 inhibitor with an IC\textsubscript{50} of 8 nM. Pain relief. Limited CNS penetration. [1]</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 1 mg, 5 mg</td>
</tr>
<tr>
<td><strong>NHE3-IN-1</strong></td>
<td>HY-100325</td>
<td>NHE3-IN-1 is a sodium/proton exchanger type 3 (NHE-3) inhibitor extracted from patent WO 2011019784 A1.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>5 mg, 10 mg, 50 mg</td>
</tr>
<tr>
<td><strong>Nicainoprol (RU-42924)</strong></td>
<td>HY-100572</td>
<td>Nicainoprol is a fast sodium-channel blocking drug, which is a potent antiarrhythmic agent.</td>
<td>99.48%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 1 mg, 5 mg</td>
</tr>
<tr>
<td><strong>Oxcarbazepine (GP 47680)</strong></td>
<td>HY-B0114</td>
<td>Oxcarbazepine (GP 47680) inhibits the binding of [3H]BTX to sodium channels with IC\textsubscript{50} of 160 μM and also inhibits the influx of 22Na\textsuperscript{+} into rat brain synaptosomes with IC\textsubscript{50} about 100 μM.</td>
<td>99.82%</td>
<td>Launched</td>
<td>10mM x 1mL in DMSO, 10 mg, 50 mg</td>
</tr>
<tr>
<td><strong>PF 04531083</strong></td>
<td>HY-105283</td>
<td>PF 04531083 is a selective Na\textsubscript{1.8} blocker, and used for the research of neuropathic/inflammatory pain.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>500 mg, 250 mg</td>
</tr>
<tr>
<td><strong>PF 05089771</strong></td>
<td>HY-12883</td>
<td>PF 05089771 is a Nav1.7 channel blocker extracted from patent WO/2010/079443 A1, compound example 788, has an IC50 of 8.6 nM.</td>
<td>99.32%</td>
<td>Phase 2</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>PF 01247324</strong></td>
<td>HY-101383</td>
<td>PF-01247324 is a selective and orally bioavailable Na\textsubscript{1.8} channel blocker with an IC\textsubscript{50} of 196 nM for recombinant human Na\textsubscript{1.8} channel.</td>
<td>99.42%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>PF 05241328</strong></td>
<td>HY-103623</td>
<td>PF-05241328 is a potent and selective inhibitor of human Nav1.7 voltage-dependent sodium channels (Nav1.7), with an IC\textsubscript{50} of 31 nM.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>5 mg, 10 mg, 50 mg</td>
</tr>
<tr>
<td><strong>PF 06305591</strong></td>
<td>HY-114301</td>
<td>PF-06305591 is a potent and highly selective voltage gated sodium channel NaV1.8 blocker, with an IC\textsubscript{50} of 15 nM. An excellent preclinical in vitro ADME and safety profile. [1]</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>5 mg</td>
</tr>
<tr>
<td><strong>PF 06869206</strong></td>
<td>HY-112065</td>
<td>PF-06869206 is an orally bioavailable selective inhibitor of the sodium-phosphate cotransporter NaPi2a (SLC34A1) with an IC\textsubscript{50} of 380 nM.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg</td>
</tr>
</tbody>
</table>
Phenytoin (5,5-Diphenylhydantoin)  
Cat. No.: HY-80448

**Bioactivity:** Phenytoin is an inactive voltage-gated sodium channel stabilizer.

**Purity:** 99.91%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 1 g, 5 g

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Phenytoin sodium (5,5-Diphenylhydantoin sodium salt)  
Cat. No.: HY-80448A

**Bioactivity:** Phenytoin sodium is an inactive voltage-gated sodium channel stabilizer.

**Purity:** 99.91%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 1 g, 5 g

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Propafenone D7 hydrochloride (SA-79 (D7 hydrochloride))  
Cat. No.: HY-80432A5

**Bioactivity:** Propafenone (D7 hydrochloride) (SA-79 (D7 hydrochloride)) is the deuterium labeled Propafenone, which is a classic anti-arrhythmic medication.

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

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Propafenone hydrochloride (SA-79 (hydrochloride))  
Cat. No.: HY-80432A

**Bioactivity:** Propafenone (hydrochloride) (SA-79 (hydrochloride)) is a class of anti-arrhythmic medication, which treats illnesses associated with rapid heart beats such as atrial and ventricular arrhythmias.

**Purity:** 99.70%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 1 g, 5 g

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Proparacaine Hydrochloride (Proxymetacaine Hydrochloride)  
Cat. No.: HY-66012

**Bioactivity:** Proparacaine Hydrochloride is a voltage-gated sodium channels antagonist with ED50 of 3.4 mM.

**Purity:** 99.56%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 100 mg

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Propoxycaine hydrochloride  
Cat. No.: HY-B1243

**Bioactivity:** Propoxycaine hydrochloride is the hydrochloride salt form of Propoxycaine, a para-aminobenzoic acid ester with local anesthetic activity. Target: sodium channel Propoxycaine binds to and inhibits voltage-gated sodium channels, thereby inhibiting the ionic flux required for the initiation and...

**Purity:** 99.98%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 50 mg

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Ranolazine (CVT 303, RS 43285-003)  
Cat. No.: HY-80280

**Bioactivity:** Ranolazine is an antianginal medication.

**Purity:** 98.38%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

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Ranolazine dihydrochloride (RS 43285)  
Cat. No.: HY-17401

**Bioactivity:** Ranolazine(RS-43285) is an antianginal agent with antiarrhythmic properties that achieves its effects via a novel mechanism of action (inhibition of the late phase of the inward sodium current), without affecting heart rate or blood pressure (BP). IC50 value: Target: sodium-dependent calcium...

**Purity:** 99.92%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in Water, 100 mg, 200 mg, 500 mg, 1 g, 5 g

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Raxatrigine (GSK-1014802; CNV1014802)  
Cat. No.: HY-12796

**Bioactivity:** Raxatrigine (GSK-1014802) is a novel small molecule state-dependent sodium channel blocker; Nav1.7 sodium channel inhibitor.

**Purity:** 99.47%
**Clinical Data:** Phase 2
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

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Raxatrigine hydrochloride (GSK-1014802 hydrochloride; CNV1014802 (hydrochloride))  
Cat. No.: HY-12796A

**Bioactivity:** Raxatrigine hydrochloride (GSK-1014802 hydrochloride) is a novel small molecule state-dependent sodium channel blocker; Nav1.7 sodium channel inhibitor.

**Purity:** 98.69%
**Clinical Data:** Phase 2
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg
Bioactivity: Riluzole is an anticonvulsant drug and belongs to the family of use-dependent Na⁺ channel blocker which can also inhibit GABA uptake with an IC₅₀ of 43 μM.

Purity: 99.83%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg, 1 g

Bioactivity: Riluzole hydrochloride is an anticonvulsant drug and belongs to the family of use-dependent Na⁺ channel blocker which can also inhibit GABA uptake with an IC₅₀ of 43 μM.

Purity: 99.94%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 50 mg, 100 mg, 500 mg

Bioactivity: Rimeporide (EMD-87580) is a potent and selective inhibitor of the Na⁺/H⁺ exchanger (NHE-1).

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Bioactivity: Rimeporide hydrochloride (EMD-87580 hydrochloride) is a potent and selective inhibitor of the Na⁺/H⁺ exchanger (NHE-1).

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

Bioactivity: Ropivacaine HCl is an anaesthetic agent and blocks impulse conduction in nerve fibres through inhibiting sodium ion influx reversibly.

Purity: 99.98%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 50 mg

Bioactivity: Ropivacaine hydrochloride monohydrate is a novel and selective voltage-gated sodium channel for pain treatment.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

Bioactivity: Sodium Channel inhibitor 1 is one of 3-Oxoisoindoline-1-carboxamides, is a novel and selective voltage-gated sodium channel for pain treatment.

Purity: 98.07%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg, 100 mg, 200 mg

Bioactivity: Sodium Channel inhibitor 2 is a sodium channel blocker extracted from patent WO 2004011439 A2, compound 3c.

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

Bioactivity: Sodium ionophore III (ETH2120) is a sodium ionophore suitable for the assay of sodium activity in blood, plasma, serum etc.

Purity: 98.07%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg, 100 mg, 200 mg

Bioactivity: Tenapanor is an inhibitor of the Na⁺/H⁺ exchanger NHE3 with IC₅₀ values of 5 and 10 nM against human and Rat NHE3, respectively.

Purity: 98.80%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Bioactivity: Tenapanor is an inhibitor of the Na⁺/H⁺ exchanger NHE3 with IC₅₀ values of 5 and 10 nM against human and Rat NHE3, respectively.

Purity: 98.08%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Bioactivity: Tetracaine is a topical local anesthetic for the eyes; works by interfering with entry of sodium ions into nerve cells.

Purity: 98.03%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g
Triamterene  
Cat. No.: HY-80575

**Bioactivity:** Triamterene blocks epithelial Na+ channel (ENaC) in a voltage-dependent manner, which used as a mild diuretic.

**Purity:** 99.17%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg

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Triamterene D5  
Cat. No.: HY-80575S

**Bioactivity:** Triamterene D5 is deuterium labeled Triamterene, which can block epithelial Na+ channel (ENaC) in a voltage-dependent manner, which used as a mild diuretic.

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

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Trichlormethiazide  
Cat. No.: HY-80235

**Bioactivity:** Trichlormethiazide is a thiazide diuretic with properties similar to those of hydrochlorothiazide.

**Purity:** 98.67%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 1 g, 5 g

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Vinpocetine (Ethyl apovincaminate)  
Cat. No.: HY-13295

**Bioactivity:** Vinpocetine(Cavinton; Ethyl apovincaminate) is a selective for PDE1 (IC50 = 21 μM). Also blocks voltage-gated Na+ channels. IC50 value: Target: PDE1; Na+ channel

**Purity:** 99.43%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg, 500 mg

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XEN907  
Cat. No.: HY-19958

**Bioactivity:** XEN907 is a novel spirooxindole NaV1.7 blocker, inhibits hNaV1.7 with IC50 of 3 nM.

**Purity:** 99.55%
**Clinical Data:** No Development Reported
**Size:** 10mM x 1mL in DMSO, 5 mg

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YM758  
Cat. No.: HY-U00309

**Bioactivity:** YM758 is a “funny” I\textsubscript{f} current channel (I\textsubscript{f} channel) inhibitor.

**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg, 10 mg, 20 mg

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Zonisamide (AD 810; CI 912)  
Cat. No.: HY-80124

**Bioactivity:** Zonisamide is a 1,2 benzisoxazole derivative and the first agent of this chemical class to be developed as an antiepileptic drug.

**Purity:** 99.72%
**Clinical Data:** Launched
**Size:** 10mM x 1mL in DMSO, 200 mg, 500 mg

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Zonisamide sodium (AD 810 sodium; CI 912 sodium)  
Cat. No.: HY-80124A

**Bioactivity:** Zonisamide sodium is a 1,2 benzisoxazole derivative and the first agent of this chemical class to be developed as an antiepileptic drug.

**Purity:** >98%
**Clinical Data:** Launched
**Size:** 200 mg, 500 mg