Product Data Sheet

A-803467

Cat. No.:	B2277
CAS No.:	944261-79-4
Formula:	C19H16ClNO4
M.Wt:	357.79
Synonyms:	
Target:	Membrane Transporter/Ion Channel
Pathway:	Sodium Channel
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾13.95 mg/mL in DMSO; ⩾2.29 mg/mL in EtOH with ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.7949 mL	13.9747 mL	27.9494 mL
5 mM	0.5590 mL	2.7949 mL	5.5899 mL
10 mM	0.2795 mL	1.3975 mL	2.7949 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	NaV1.8 channel blocker,potent and selective
IC_{50} & Target	8 nM (NaV1.8 channel)

In Vitro

Cell Viability Assay

Cell Line:	Rat dorsal root ganglion (DRG) neurons and HEK-293 cells expressing human Nav1.8 sodium channels
Preparation method：	The solubility of this compound in DMSO is > 13.95 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.

	Reacting conditions:	0 ~ 100 μM
	Applications:	A-803467 at the dose of 100 nM significantly blocks recombinant human and native rat Nav1.8 currents. In rat DRG neurons, A-803467 concentration-dependently blocked tetrodotoxin-resistant (TTX-R) current at the potential of -40 mV, with the IC50 value of 140 nM.
In Vivo	**Animal experiment**	
	Animal models:	Spinal nerve ligated rats
	Dosage form:	20 mg/kg; i.v.
	Applications:	In spinal nerve ligated rats, A-803467 markedly reduced spontaneous and von Frey hair evoked firing of spinal dorsal horn wide dynamic range neurons by 66% and 53%, respectively, which implied that systemic administration of A-803467 altered the activity of spinal sensory neurons. In addition, these effects of A-803467 were dose-dependent.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Jarvis M F, Honore P, Shieh C C, et al. A-803467, a potent and selective Nav1. 8 sodium channel blocker, attenuates neuropathic and inflammatory pain in the rat. Proceedings of the National Academy of Sciences, 2007, 104(20): 8520-8525.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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