

Suzetrigine

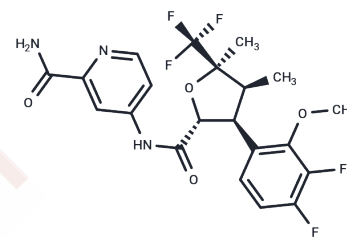
Chemical Properties

CAS No. : 2649467-58-1

Formula: C₂₁H₂₀F₅N₃O₄

Molecular Weight: 473.39

Storage: Store at low temperature, Keep away from direct sunlight
 Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	Suzetrigine (VX-548) is a small molecule inhibitor and a highly selective inhibitor of the Nav1.8 target, with oral activity and good peripheral nerve selectivity. Suzetrigine is used for the treatment of moderate to severe acute pain following abdominoplasty or bunionectomy.
Targets(IC50)	Sodium Channel
In vitro	<p>Methods: The inhibitory effect of Suzetrigine was evaluated using automated patch-clamp in HEK, CHO, or ND7/23 cells expressing Nav1.8, and manual patch-clamp in human primary DRG neurons, with incubation at 1–10 nM for 2–10 minutes.</p> <p>Results: Suzetrigine selectively inhibited Nav1.8 with sub-nanomolar potency (IC₅₀ = 0.68 nM) and concentration-dependently suppressed action potential firing in DRG neurons. [1]</p>
In vivo	<p>Methods: In patients following abdominoplasty or bunionectomy, Suzetrigine was administered at the highest dose (initial oral dose of 100 mg, followed by 50 mg every 12 hours) or a lower dose (initial dose of 20 mg, followed by 10 mg every 12 hours) and compared with placebo to observe changes in acute pain over 48 hours.</p> <p>Results: Compared with placebo, Suzetrigine reduced acute pain within 48 hours after surgery only at the highest dose.[1]</p>

Solubility Information

Solubility	DMSO: 161 mg/mL (340.1 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1124 mL	10.5621 mL	21.1242 mL
5 mM	0.4225 mL	2.1124 mL	4.2248 mL
10 mM	0.2112 mL	1.0562 mL	2.1124 mL
50 mM	0.0422 mL	0.2112 mL	0.4225 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Osteen, Jeremiah D et al. Pharmacology and Mechanism of Action of Suzetrigine, a Potent and Selective NaV1.8 Pain Signal Inhibitor for the Treatment of Moderate to Severe Pain. Pain and therapy vol. 14,2 (2025): 655-674.
Jones J, et al. VX21-548-101 and VX21-548-102 Trial Groups. Selective Inhibition of NaV1.8 with VX-548 for Acute Pain. N Engl J Med. 2023 Aug 3;389(5):393-405.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481