



Product Information

Product ID A064766

CAS No. 1235560-28-7

Chemical Name

Synonym ABT639

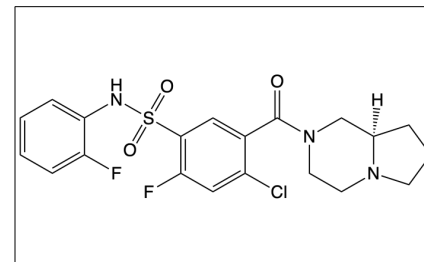
Formula C₂₀H₂₀ClF₂N₃O₃S

Formula Wt. 455.9

Melting Point

Purity ≥99%

Solubility



Bulk quantities available upon request

Product ID	Size
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A064766	5 mg
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A064766	25 mg
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Store Temp -20°C

Ship Temp Ambient

Description ABT-639 is an orally bioavailable, CaV3.2 T-type calcium channel blocker with potential anti-hyperalgesic activity. Upon oral administration, ABT-639 selectively binds to and blocks the CaV3.2 isoform of the low voltage-gated T-type calcium channels located in peripheral sensory neurons. This prevents the influx of calcium ions into the cell upon membrane depolarization. The inhibition of both neuronal hyperexcitability and firing of nociceptive, peripheral sensory neurons induces an anti-nociceptive effect. The expression of the CaV3.2 T-type channels plays a key role in nociceptive and neuropathic pain.
NCI Thesaurus (NCIt)

References Zhang Q, Xia Z, Joshi S, et al. Optimization of ADME properties for sulfonamides leading to the discovery of a T-type calcium channel blocker, ABT-639. *ACS Med Chem Lett.* 2015 Apr 28;6(6):641-644. PMID: 26101566

Jarvis M, Scott V, McGaraughty S, et al. A peripherally acting, selective T-type calcium channel blocker, ABT-639, effectively reduces nociceptive and neuropathic pain in rats. *Biochem Pharmacol.* 2014 Jun 15;89(4):536-544. PMID: 24726441

Ziegler D, Duan W, An G, et al. A randomized double-blind, placebo-, and active-controlled study of T-type calcium channel blocker ABT-639 in patients with diabetic peripheral neuropathic pain. *Pain.* 2015 Oct;156(10):2013-2020. PMID: 26067585

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.