

Z944, T-type calcium channel blocker

Catalog	Unit
TBI3994-5MG	5 mg
TBI3994-25MG	25 mg

Product Details

Formal Name: N-[[1-[2-(tert-Butylamino)-2-oxoethyl]piperidin-4-yl]methyl]-3-chloro-5-fluorobenzamide

Alternate Names: Ulixacaltamide; PRAX-944

Molecular Formula: C₁₉H₂₇ClFN₃O₂

Formula Weight: 383.9

CAS Number: 1199236-64-0

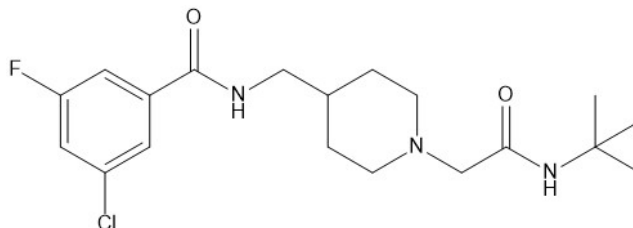
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (> 25 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

T-type calcium channel blocker

Functions

Highly selective (70 fold over N-type) T-type calcium channel blocker (IC₅₀ hCav3.2 = 50 nM).¹ It was 2.5 to 4-fold more potent for the inactivated T-type channel than for the closed channel. It was also selective against the Cav1.2, hERG, and Nav1.5 channels. Potently suppressed seizures in absence epilepsy and temporal lobe epilepsy models. It reversed thermal hyperalgesia and conditioned place preference in a neuropathic pain model. Z944 reversed mechanical allodynia in a model of persistent inflammatory pain and displayed an antihyperalgesic effect in a model of trigeminal neuralgia. Significantly improved autism spectrum disorder-related behaviors via suppression of reticular thalamic hyperexcitability.

Application Procedures

First dissolved in Soluble in DMSO (> 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.