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**Product Data Sheet**

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Product Name: Z 944  
Cat. No.: GC50432

**Chemical Properties**

Cas. No. 1199236-64-0

SMILES CC(C)(NC(CN1CCC(CC1)CNC(C2=CC(Cl)=CC(F)=C2)=O)=O)C

Formula  $C_{19}H_{27}ClFN_3O_2$  M.Wt 383.89

Solubility DMSO : 50 mg/mL (130.25 mM; ultrasonic and warming and heat to 60°C) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

**Background**

Selective T-type  $Ca^{2+}$  channel blocker (IC<sub>50</sub> values are 50 to 160 nM for hCav3.1, hCav3.2 and hCav3.3). Exhibits 50 to 600 fold selectivity for Cav3.x channels over related ion channels (Cav1.2, hERG and Nav1.5). Has no effect on action potential properties in isolated heart Purkinje fibers and no adverse effects on ECG parameters in vivo. Exhibits anti-seizure effects in animal models.

Tringham et al (2012) T-type calcium channel blockers that attenuate thalamic burst firing and suppress absence seizures. *Sci.Transl.Med.* 4 121 PMID:22344687 |Casillas-Espinosa et al (2015) Z944, a novel selective T-type calcium channel antagonist delays the progression of seizures in the amygdala kindling model. *PLoS One.* 10 e0130012 PMID:26274319

**Caution: Product has not been fully validated for medical applications. For research use only.**

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