

Product Name: Z 944

Catalog No.: 6367

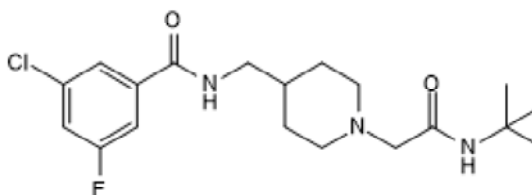
Batch No.: 1

CAS Number: 1199236-64-0

IUPAC Name: 4-[[[3-Chloro-5-fluorobenzoyl)amino]methyl]-N-(1,1-dimethylethyl)-1-piperidineacetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₂₇ClFN₃O₂
Batch Molecular Weight: 383.89
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	59.45	7.09	10.95
Found	59.27	7.17	10.88

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Z 944

Catalog No.: 6367

Batch No.: 1

CAS Number: 1199236-64-0

IUPAC Name: 4-[[[3-Chloro-5-fluorobenzoyl)amino]methyl]-N-(1,1-dimethylethyl)-1-piperidineacetamide

Description:

Selective T-type Ca²⁺ channel blocker (IC₅₀ values are 50 to 160 nM for hCa_v3.1, hCa_v3.2 and hCa_v3.3). Exhibits 50 to 600 fold selectivity for Ca_v3.x channels over related ion channels (Ca_v1.2, hERG and Na_v1.5). 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.

Physical and Chemical Properties:

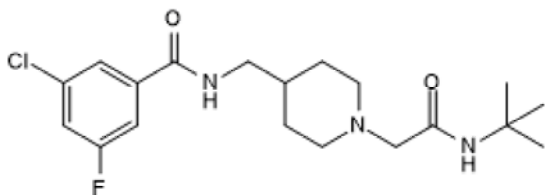
Batch Molecular Formula: C₁₉H₂₇ClFN₃O₂

Batch Molecular Weight: 383.89

Physical Appearance: Beige solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

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.

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.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956