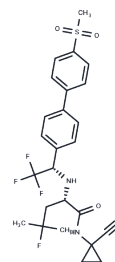


Odanacatib

Chemical Properties

CAS No. :	603139-19-1
Formula:	C ₂₅ H ₂₇ F ₄ N ₃ O ₃ S
Molecular Weight:	525.56
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Odanacatib is an inhibitor of cathepsin K with potential anti-osteoporotic activity.
Targets(IC50)	Cysteine Protease
In vitro	In rats, Odanacatib (10 mg/kg) exhibits efficient clearance (Cl: 2 mL kg ⁻¹ min ⁻¹), low volume of distribution (V _{dss} : 1.1 L kg ⁻¹), a half-life (T _{1/2}) of 6 hours, and oral bioavailability (F) of 8%.
In vivo	Odanacatib exhibits inhibitory activity towards human cathepsin K (IC ₅₀ =0.2 nM) and rabbit cathepsin K (IC ₅₀ =1 nM). It also demonstrates effectiveness in human cell assays with an IC ₅₀ value of 5 nM.

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 93 mg/mL (176.95 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9027 mL	9.5137 mL	19.0273 mL
5 mM	0.3805 mL	1.9027 mL	3.8055 mL
10 mM	0.1903 mL	0.9514 mL	1.9027 mL
50 mM	0.0381 mL	0.1903 mL	0.3805 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.

Reference

- Gauthier JY, et al. Bioorg Med Chem Lett. 2008, 18(3), 923-928.
Leung P, et al. Bone. 2011, 49(4), 623-635.
Pennypacker BL, et al. J Bone Miner Res. 2011, 26(2):252-262.
Masarachia PJ, et al. J Bone Miner Res. 2012, 27(3), 509-523.

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: 36 Washington Street, Wellesley Hills, MA 02481