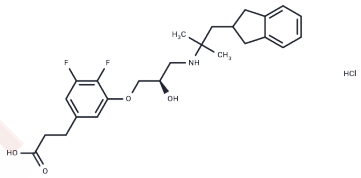
Data Sheet (Cat.No.T34385)

TargetMol

Ronacaleret HCl

Chemical Properties



CAS No. : 702686-96-2

Formula: C25H32ClF2NO4

Molecular Weight: 483.98

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Ronacaleret HCl (SB-751689) is a small molecule CaSR antagonist for the treatment of endocrine and metabolic diseases, skin and musculoskeletal disorders.
Targets(IC50)	CaSR
In vivo	For 569 postmenopausal women with low BMD offered open-label 20 μg teriparatide sc once daily or were randomized to 100, 200, 300, or 400 mg oral Ronacaleret HCl once daily, 70 mg alendronate once weekly, or placebo and were followed for up to 12 months.Results: With Ronacaleret HCl, the increases in lumbar spine BMD at 12 months (0.3-1.6%) were significantly lower than those attained with teriparatide (9.1%) or alendronate (4.5%). There were small decreases in total hip, femoral neck, and trochanter BMD at month 12 with Ronacaleret HCl compared with increases in the teriparatide and alendronate arms. Bone turnover markers increased in the Ronacaleret HCland teriparatide arms and decreased in the alendronate arm. PTH elevations with Ronacaleret HCl were prolonged relative to those previously reported with teriparatide. Conclusion: The densitometric findings in the context of prolonged PTH elevation and increased bone turnover suggest Ronacaleret HClinduces mild hyperparathyroidism. Ronacaleret HCl only modestly increased lumbar spine BMD and decreased BMD at hip sites.[1]

Solubility Information

Solubility	DMSO: 47.5 mg/mL (98.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0662 mL	10.331 mL	20.662 mL
5 mM	0.4132 mL	2.0662 mL	4.1324 mL
10 mM	0.2066 mL	1.0331 mL	2.0662 mL
50 mM	0.0413 mL	0.2066 mL	0.4132 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Fitzpatrick LA, et al. The effects of ronacaleret, a calcium-sensing receptor antagonist, on bone mineral density and biochemical markers of bone turnover in postmenopausal women with low bone mineral density. J Clin Endocrinol Metab. 2011;96(8):2441-2449.

Vogt FG, et al. Solid-state NMR analysis of a complex crystalline phase of ronacaleret hydrochloride. J Phys Chem B. 2014 Aug 28;118(34):10266-84.

Fitzpatrick LA, et al. Bone mineral density changes following discontinuation of ronacaleret treatment: off-treatment extension of a randomized, dose-finding phase II trial. Bone. 2014 Oct;67:104-8.

Fitzpatrick LA, et al. Ronacaleret, a calcium-sensing receptor antagonist, increases trabecular but not cortical bone in postmenopausal women. J Bone Miner Res. 2012;27(2):255-262.