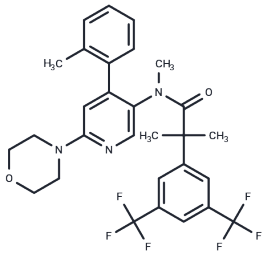
Data Sheet (Cat.No.T14524)

TargetMol

Befetupitant

Chemical Properties



CAS No. : 290296-68-3

Formula: C29H29F6N3O2

Molecular Weight: 565.55

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	Befetupitant (Ro67-5930) is a potent and selective tachykinin 1 receptor (NK1R) antagonist for the study of corneal neovascularization.
Targets(IC50)	Neurokinin receptor
In vivo	In the alkali burn model, Befetupitant, a highly selective NK1R antagonist, was tested. Hemangiogenesis and lymphangiogenesis were effectively reduced (P<0.05) after topical application of Befetupitant for 4 days at both concentrations (0.4 and 1.6 mg/mL). However, both Befetupitant and its vehicle DMSO induced corneal opacity even in healthy controls, as observed during slit-lamp examination. Furthermore, fluorescein and hematoxylin-eosin staining confirmed DMSO toxicity by revealing epithelial damage and inflammatory cellular infiltration in the stroma. Despite Befetupitant's effectiveness in reducing corneal neovascularization (CNV) in the alkali burn model, its toxicity due to the DMSO vehicle led to the decision not to test it in the suture model[1].

Solubility Information

Solubility	DMSO: 6.88 mg/mL (12.17 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7682 mL	8.841 mL	17.6819 mL
5 mM	0.3536 mL	1.7682 mL	3.5364 mL
10 mM	0.1768 mL	0.8841 mL	1.7682 mL
50 mM	0.0354 mL	0.1768 mL	0.3536 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

Bignami F, et al. NK1 receptor antagonists as a new treatment for corneal neovascularization. Invest Ophthalmol Vis Sci. 2014 Sep 16;55(10):6783-94.