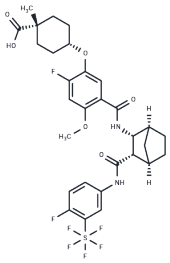
Data Sheet (Cat.No.T85783)

TargetMol

AZ7976

Chemical Properties



CAS No. : 2813866-27-0

Formula: C30H33F7N2O6S

Molecular Weight: 682.65

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	AZ7976 (Compound 42), a potent and highly selective agonist for Relaxin Family Peptide Receptor 1 (RXFP1) with a pEC 50 value greater than 10.5, operates through an allosteric mechanism to enhance RXFP1's cAMP signaling, which physiologically elevates heart rate. This property makes AZ7976 a valuable tool in cardiovascular disease research [1].
Targets(IC50)	RXFP receptor
In vivo	Compound AZ7976, administered intravenously (initial dose of 1.5 mg/kg followed by continuous infusion at 9.0 mg/kg), significantly elevated the heart rate and mean arterial blood pressure in Sprague-Dawley rats [1]. Pharmacokinetic analysis [1] revealed the following parameters: volume of distribution (Vdss) at 2.3 L/kg, clearance (Cl) at 38 mL/min/kg, and a half-life (t 1/2) of 2.9 hours, with an oral dose bioavailability (F) of 11% at a dose of 1.46 μmol/kg. The observed cardiovascular responses are similar to those seen following activation of the RXFP1 receptor.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4649 mL	7.3244 mL	14.6488 mL
5 mM	0.293 mL	1.4649 mL	2.9298 mL
10 mM	0.1465 mL	0.7324 mL	1.4649 mL
50 mM	0.0293 mL	0.1465 mL	0.293 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.

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