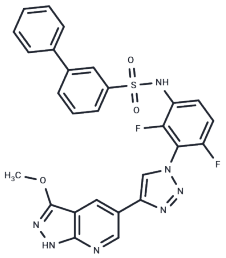
Data Sheet (Cat.No.T210760)

TargetMol

ZAK-IN-1

Chemical Properties



CAS No. : 2362525-64-0

Formula: C27H19F2N7O3S

Molecular Weight: 559.55

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	ZAK-IN-1 is an orally active and selective inhibitor of the leucine zipper and sterile-alpha motif kinase ZAK, with an IC50 of 4 nM and a KD of 8 nM. It demonstrates exceptional selectivity against 403 types of wild-type kinases. ZAK-IN-1 effectively blocks the p38/GATA-4 and JNK/c-Jun signaling pathways, significantly suppressing cardiac hypertrophy. This compound is applicable in the study of hypertrophic cardiomyopathy (HCM).
Targets(IC50)	MAPK
In vitro	ZAK-IN-1 (Compound 6p) (0-10 μg/mL, 24 h) effectively inhibits cardiomyocyte hypertrophy induced by ZAKα overexpression in H9c2 cells by blocking the p38/GATA-4 and JNK/c-Jun signaling pathways.
In vivo	ZAK-IN-1 (Compound 6p) demonstrated significant anti-cardiac hypertrophy effects in a spontaneous hypertensive rat model when administered orally at doses of 0-10 mg/kg once daily for 8 weeks.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7872 mL	8.9358 mL	17.8715 mL
5 mM	0.3574 mL	1.7872 mL	3.5743 mL
10 mM	0.1787 mL	0.8936 mL	1.7872 mL
50 mM	0.0357 mL	0.1787 mL	0.3574 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481