

Kira8 Hydrochloride

Chemical Properties

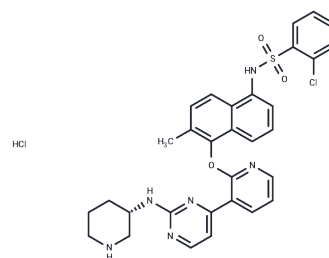
CAS No. : 2250019-92-0

Formula: C31H30Cl2N6O3S

Molecular Weight: 637.58

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Kira8 Hydrochloride is a mono-selective IRE1 α inhibitor that allosterically attenuates IRE1 α RNase activity with an IC50 of 5.9 nM.
Targets(IC50)	Adenosine Receptor
In vitro	Kira8 more effectively diminishes IRE1 α -driven apoptosis in INS-1 cells compared to KIRA6 and additionally counteracts XBP1 splicing induced by GNF-2. It inhibits IRE1 α oligomerization and significantly reduces IRE1 α RNase activity targeting XBP1 and Ins2 RNAs.
In vivo	Male Ins2+/Akita mice are injected i.p. with KIRA8 (50 mg/kg; daily; for 35 days), significant reduction of hyperglycemia become apparent over several weeks. One week treatment of pre-diabetic NODs mice with Kira8 (50 mg/kg; i.p.; once a day) leads to significant reductions in islet XBP1 splicing and TXNIP mRNAs, and preserves Ins1/Ins2, BiP and MANF mRNAs.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5684 mL	7.8422 mL	15.6843 mL
5 mM	0.3137 mL	1.5684 mL	3.1369 mL
10 mM	0.1568 mL	0.7842 mL	1.5684 mL
50 mM	0.0314 mL	0.1568 mL	0.3137 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

Morita S, et al. Targeting ABL-IRE1 α Signaling Spares ER-Stressed Pancreatic β Cells to Reverse Autoimmune Diabetes. *Cell Metab.* 2017 Apr 4;25(4):883-897.e8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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