

Product Name : KIRA6

Synonyms : —

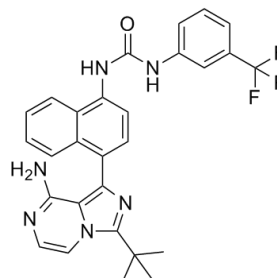
Cat No. : M22059

CAS Number : 1589527-65-0

Molecular Formula : C₂₈H₂₅F₃N₆O

Formula Weight : 518.53

Chemical Name : —



Description : KIRA6 is an effective inhibitor of IRE1α RNase kinase (IC₅₀: 0.6 μM). It can trigger an apoptotic response. KIRA6 (10-1000 nM, 72 hours) strongly compromises the viability of the KIT-dependent cell line HMC-1.1 at the low nM concentration, in a manner that coincided with KIT blockade. KIRA6 (1nM-100μM) binds to the cytoplasmic domain of KIT with a K_d value of 10.8 μM. KIRA6 (10-1000 nM, 1 hour) reduces signaling output of KIT, including the phosphorylation of KIT as well as its downstream signaling modules, PSTAT5 and phosphorylated ERK1/2. KIRA6 (1 μM, 0-48 hours) inhibits Ins1 mRNA decay from IRE1α hyperactivation in a dose-dependent manner. KIRA6 (0.1-10μM, 72 hours) dose-dependently reduces 1NM-PP1 potentiation of Ins1 apoptosis during ER stress in a dose-dependent manner [2]. KIRA6 (intraperitoneal injection; 5 mg/kg; 37 days) shows significant amelioration of random glucose levels over several weeks compared to the vehicle, both fed ad lib. KIRA6 (i.p, 5 mg/kg, 21 or 18 days post injections) increases both plasma insulin and C-peptide levels, remains insulin-positive islet areas at a high level after stopping injections in the Akita Mouse.

Pathway : Others

Target : Other Targets

Receptor : IRE1α

Solubility : DMSO:5 mg/mL (9.64 mM); Ethanol:2 mg/mL (3.86 mM; Need ultrasonic)

SMILES : CC(C)(C)C1=NC(=C2N1C=CN=C2N)C1=CC=C(NC(=O)NC2=CC=CC(=C2)C(F)(F)F)C2=CC=CC=C12

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Mahameed M, et al. The unfolded protein response modulators GSK2606414 and KIRA6 are potent KIT inhibitors. Cell Death Dis. 2019 Apr 1;10(4):300.