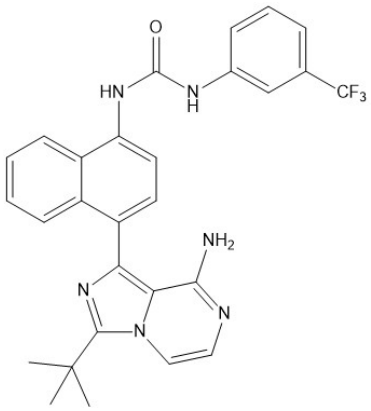
Tribioscience

KIRA6, IRE1α inhibitor

Catalog	Unit
TBI4886-5MG	5 mg
TBI4886-25MG	25 mg

Product Details

Formal Name: 1-[4-(8-Amino-3-tert-butylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-3-[3-(trifluoromethyl)phenyl]urea
Molecular Formula: $C_{28}H_{25}F_3N_6O$
Formula Weight: 518.5
CAS Number: 1589527-65-0
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 25 mg/ml)
Storage: -20°C
Stability: ≥ 2 years.



Applications

IRE1α inhibitor

Functions

Allosteric inhibitor of the endoplasmic reticulum protein IRE1α. It inhibits IRE1α kinase activity (IC_{50} = 0.60 μM), XBP1 RNA cleavage, Ins2 RNA cleavage, and oligomerization. Prevented cell death during ER stress/UPR in vivo. It reduced stress-induced inflammation caused by immunogenic cell death via targeting of HSP60. Abolished neuroinflammation and neuronal cell death caused by PAD4 overexpression in traumatic brain injury. It also was shown to block leukotriene biosynthesis in human phagocytes and inhibit mast cells. KIRA6 blocked the induction of myeloid-derived suppressor cells and overcame resistance to anti-PD-1 therapy in 4T1 tumor cells.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml) or in Ethanol (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

For research use only.