Data Sheet (Cat.No.T61102)

TargetMol

HIF-1/2α-IN-2

Chemical Properties

CAS No. :	862974-22-9
Formula:	C16H11FN4O2S
Molecular Weight:	342.35
Storage:	Keep away from moisture,Keep away from direct sunlight 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	HIF-1/2α-IN-2 is a selective inhibitor targeting hypoxia-inducible factors 1α and 2α (HIF-1α and HIF-2α). It induces a state of cellular iron deficiency by inhibiting the activity of iron-sulfur cluster assembly protein 2 (ISCA2), thereby reducing HIF-2α synthesis and ultimately triggering ferroptosis. HIF-1/2α-IN-2 is widely used in research related to tumor biology, metabolic regulation, and ischemia.
Targets(IC50)	Others,HIF/HIF Prolyl-Hydroxylase
In vitro	HIF-1/2α-IN-2(0-25 μM; 24 h) decreases HIF-2α translation instead of transcription, with a downward trend in VEGFA and POU5F1 (HIF-2α target genes) transcription and insignificant effect on EPAS1 (HIF-2α)[1]. HIF-1/2α-IN-2 (0-100 μM, 24 h) inhibits the production of luciferase driven by the HIF-2α Iron-Responsive Element (IRE) luciferase reporter with an IC50 value of 3.9 μM, to block IRE-dependent translation of HIF-2α[1]. HIF-1/2α-IN-2 (0, 10, 50 μM) protects ISCA2 from Pronase-mediated (4 μg/mL) degradation, and (1.5 μM; 24 h) targets ISCA2 to induce iron and metals accumulation in normoxia 786-0 cells[1]. HIF-1/2α-IN-2 (0-100 μM; 24 h) results ISCA2 inhibition and promotes cell death via ferroptosis[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.921 mL	14.6049 mL	29.2099 mL
5 mM	0.5842 mL	2.921 mL	5.842 mL
10 mM	0.2921 mL	1.4605 mL	2.921 mL
50 mM	0.0584 mL	0.2921 mL	0.5842 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.

Reference

Green YS, et al. ISCA2 inhibition decreases HIF and induces ferroptosis in clear cell renal carcinoma. Oncogene. 2022 Oct;41(42):4709-4723.