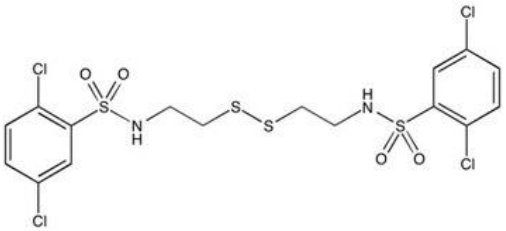
Tribioscience

KC7F2, HIF-1α Inhibitor

Catalog	Unit
TBI4714-10MG	10 mg
TBI4714-50MG	50 mg

Product Details

Formal Name: N,N'-(Dithiodi-2,1-ethanediyl)bis[2,5-dichlorobenzenesulfonamide
Molecular Formula: $C_{16}H_{16}Cl_4N_2O_4S_4$
Formula Weight: 570.4
CAS Number: 927822-86-4
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (up to at least 25 mg/ml)
Storage: -20°C
Stability: ≥ 1 year.



Applications

HIF-1a Inhibitor

Functions

Inhibits HIF-1α (IC50 = 20 μM in a HIF-reporter cell line). It suppresses mTORC1 phosphorylation of eukaryotic translation initiation factor 4E binding protein 1 (4EBP1) and p70 S6 kinase (S6K), thereby down-regulating translation of HIF-1α transcripts into protein1. It shows marked dose-response cytotoxicity (IC50 = 15 - 25 μM) in cancer cell lines such as MCF7 and A5491. Decreases viability of epidermal stem cells in a wound healing model. Treatment with 10 μM KC7F2 significantly reduced NKCC1, but not NFAT5, expression in hippocampal neurons in a model of hypoxia-ischemia.

Application Procedures

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

For research use only.