Sulfuretin Inhibitor

PRODUCT OVERVIEW

Product Name	Sulfuretin, Inhibitor
Full Product Name	Sulfuretin
Form/Format	Solid. Powder
Purity/Purification	98.00%
Preparation and Storage	Store at -20 degree C for 3 years powder -80 degree C for 2 years in solvent
Molecular Weight	270.24
Solubility	<1mg/ml refers to the product slightly soluble or insoluble
Formula	C15H10O5
SMILES	Oc(cc1)cc(O/C2=C\c(cc3)cc(O)c3O)c1C2=O
CAS Number	120-05-8
Target & IC50	PI3K Akt GSK-3
In Vitro	In this study, we investigated the protective effects of Sulfuretin against tert-butyl hydroperoxide (t-BHP)-induced oxidative injury. The results indicated that the addition of Sulfuretin before t-BHP treatment,significantly inhibited cytotoxicity and reactive oxygen species (ROS) production in human liver-derived HepG2 cells. Sulfuretin up-regulated the activity of the antioxidant enzyme heme oxygenase (HO)-1 via nuclear factor E2-related factor 2 (Nrf2) translocation into the nucleus and increased the promoter activity of the antioxidant response element (ARE). Moreover, Sulfuretin exposure enhanced the phosphorylation of c-Jun N-terminal kinase (JNK) and extracellular signal-regulated kinase 1/2 (ERK1/2), which are members of the mitogen-activated protein kinase (MAPK) family. Furthermore, cell treatment with a JNK inhibitor (SP600125) and ERK inhibitor (PD98059) reduced Sulfuretin-induced HO-1 expression and decreased its protective effects[1]
Product Categories/Family for Sulfuretin, inhibitor	PI3K/Akt/mTOR signaling; PI3K; Cytoskeletal Signaling
Related Product Information for Sulfuretin, inhibitor	Sulfuretin is a potent anti-oxidant, has protective effect against t-BHP-induced oxidative damage in human liver-derived HepG2 cells is attributable to its ability to scavenge ROS and up-regulate the activity of HO-1 through the Nrf2/ARE and JNK/ERK signaling pathways.
Product References and Citations for Sulfuretin, inhibitor	The cytoprotective effect of sulfuretin against tert-butyl hydroperoxide-induced hepatotoxicity through Nrf2/ARE and JNK/ERK MAPK-mediated heme oxygenase-1 expression. Int J Mol Sci. 2014 May 19;15(5):8863-77. The cytoprotective effect of sulfuretin against tert-butyl hydroperoxide-induced hepatotoxicity through Nrf2/ARE and JNK/ERK MAPK-mediated heme oxygenase-1 expression. Int J Mol Sci. 2014 May 19;15(5):8863-77. Sulfuretin-induced miR-30C selectively downregulates cyclin D1 and D2 and triggers cell death in human cancer cell lines. Biochem Biophys Res Commun. 2013 Feb 15;431(3):572-8. Sulfuretin from heartwood of Rhus verniciflua triggers apoptosis through activation of Fas, Caspase-8, and the mitochondrial death pathway in HL-60 human leukemia cells.J Cell Biochem. 2012 Sep;113(9):2835-44.
Other Notes	Small volumes of Sulfuretin, inhibitor vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Sulfuretin purchase	MBS5760953 is an inhibitor targeting Sulfuretin.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/inhibitor/sulfuretin/5760953