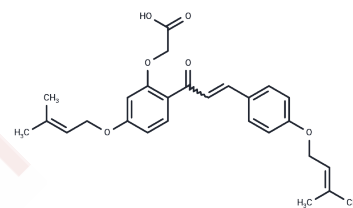


Sofalcone

Chemical Properties

CAS No. :	64506-49-6
Formula:	C ₂₇ H ₃₀ O ₆
Molecular Weight:	450.52
Storage:	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	Sofalcone (SU-88), a gastric antiulcer agent in clinical use, is known to induce the expression of Heme oxygenase-1 (HO-1) in gastric epithelium.
Targets(IC50)	Antibacterial, Autophagy
In vitro	Sofalcone (50 μmol/L) significantly enhances HO-1 mRNA and protein expression in both trophoblasts and primary human umbilical vein endothelial cells (HUVECs), evidenced by Western blot analyses and comparison with control groups (P<0.05). It also boosts Nrf2 presence in HUVEC nuclear fractions after 6 hours and upregulates NQO1, TXN, and GCLC expression in primary HUVECs dose-dependently over 24 hours. Additionally, Sofalcone markedly reduces sFlt-1 concentrations in culture media and decreases THP-1 monocyte adherence to HUVECs in a dose-dependent manner, underscoring its potential therapeutic implications for vascular health.
Cell Research	Primary HUVECs are seeded at 60,000 cells per well and incubated at 37°C for 14 to 16 hours to allow tube formation. Cells are then cultured in the presence of either TNF-α (10 ng/mL) alone, with both TNF-α (10 ng/mL) and Sofalcone 50 μM, or control media for 8 to 12 hours. Tube formation is assessed, and images are captured using microscope at ×4 magnification.

Solubility Information

Solubility	DMSO: 50 mg/mL (110.98 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.55 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2197 mL	11.0983 mL	22.1966 mL
5 mM	0.4439 mL	2.2197 mL	4.4393 mL
10 mM	0.222 mL	1.1098 mL	2.2197 mL
50 mM	0.0444 mL	0.222 mL	0.4439 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

Onda K, et al. Sofalcone upregulates the nuclear factor (erythroid-derived 2)-like 2/heme oxygenase-1 pathway, reduces soluble fms-like tyrosine kinase-1, and quenches endothelial dysfunction: potential therapeutic for preeclampsia. *Hypertension*. 2015 Apr;65(4):855-62.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481