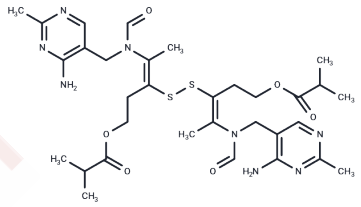
Data Sheet (Cat.No.T5913)

TargetMol

Sulbutiamine

Chemical Properties



CAS No. : 3286-46-2

Formula: C32H46N8O6S2

Molecular Weight: 702.89

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	Sulbutiamine (Bisibuthiamine) is an antioxidant that act by inhibiting oxidative stress induced retinal ganglion cell death.
Targets(IC50)	Others,Antioxidant,Endogenous Metabolite
In vitro	Sulbutiamine attenuates apoptotic cell death induced by serum deprivation and stimulates GSH and GST activity in a dose dependent manner. Furthermore, sulbutiamine decreases the expression of cleaved caspase-3 and AIF.

Solubility Information

Solubility	DMSO: 40 mg/mL (56.91 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (2.85 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4227 mL	7.1135 mL	14.227 mL
5 mM	0.2845 mL	1.4227 mL	2.8454 mL
10 mM	0.1423 mL	0.7113 mL	1.4227 mL
50 mM	0.0285 mL	0.1423 mL	0.2845 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

Kwag J , Majid A S A , Kang K D . Evidence for Neuroprotective Effect of Sulbutiamine against Oxygen-Glucose Deprivation in Rat Hippocampal CA1 Pyramidal Neurons[J]. Biological & Pharmaceutical Bulletin, 2011, 34(11): 1759-1764.

Kang K D , Majid A S A , Kim K A , et al. Sulbutiamine Counteracts Trophic Factor Deprivation Induced Apoptotic Cell Death in Transformed Retinal Ganglion Cells[J]. Neurochemical Research, 2010, 35(11):1828-1839.