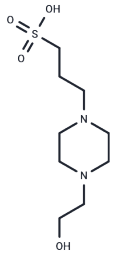
Data Sheet (Cat.No.T20821)

TargetMol

HEPPS

Chemical Properties



CAS No. : 16052-06-5

Formula: C9H20N2O4S

Molecular Weight: 252.33

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	HEPPS exhibits inhibitory activity against the amyloid-beta precursor protein, reducing Aβ aggregation burden and improving neuronal autophagy flux, thereby alleviating neuronal apoptosis and traumatic brain injury (TBI) in mice. It can be used for research into Alzheimer's disease and neurological disorders.
Targets(IC50)	Beta Amyloid
In vivo	**Methods**: A mouse model of traumatic brain injury (TBI) was established using controlled cortical impact (CCI). HEPPS was administered orally at a dose of 120 mg/kg immediately after injury and then once daily for 3 or 7 days. Aβ accumulation, autophagy, apoptosis, and neurological function were evaluated through histological and molecular analyses. A chloroquine-treated group was included to assess whether the effects of HEPPS were mediated through autophagy. **Results**: HEPPS significantly reduced Aβ accumulation and axonal injury in the brain after TBI, improved synaptic function and autophagic flux, decreased neuronal apoptosis, prevented brain tissue loss, and enhanced motor and cognitive functions. These protective effects were partially reversed by chloroquine treatment, suggesting that the neuroprotective effect of HEPPS is associated with enhanced autophagy [1].

Solubility Information

Solubility	H2O: 200 mg/mL (792.61 mM),Sonication is recommended. DMSO: 1 mg/mL (3.96 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9631 mL	19.8153 mL	39.6306 mL
5 mM	0.7926 mL	3.9631 mL	7.9261 mL
10 mM	0.3963 mL	1.9815 mL	3.9631 mL
50 mM	0.0793 mL	0.3963 mL	0.7926 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

Anthony Jalin AMA,et,al. EPPS treatment attenuates traumatic brain injury in mice by reducing Aβ burden and ameliorating neuronal autophagic flux. Exp Neurol. 2019 Apr;314:20-33.