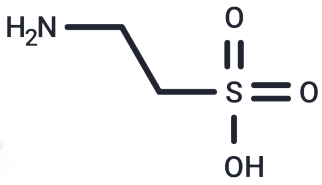
Data Sheet (Cat.No.T0022)

TargetMol

Taurine

Chemical Properties



CAS No. : 107-35-7

Formula: C2H7NO3S

Molecular Weight: 125.15

Storage: Store at low temperature
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	Taurine (2-Aminoethanesulfonic acid) is an organic acid widely distributed in animal tissues and is one of the constituents of bile acids. Taurine is involved in a number of processes related to energy expenditure and muscle function, and can treat fatigue and muscles as well as improve immune function.
Targets(IC50)	Endogenous Metabolite,Autophagy,LDL
In vitro	**METHODS**: Primary alveolar epithelial cells from mice were treated with TGF-β1 (1-3 ng/mL) and TD139 (10 μM), and the expression levels of target proteins were detected by Western Blot. **RESULTS**: TD139 blocked TGF-β1-induced β-catenin phosphorylation. [1] **METHODS**: FTC-133 and 8505C cells were treated with TD139 (0-100 μM) for 72 h. Cell viability was determined by CCK8 assay. **RESULTS**: TD139 decreased cell viability in a dose-dependent manner. [2]
In vivo	**METHODS**: To investigate the effect on the fibrotic phase of bleomycin-induced lung injury, TD139 (10 μg) was administered as an endotracheal drip to the lungs of mice with pulmonary fibrosis four times every two days. **RESULTS**: In the lungs of WT mice treated with TD139, there was a significant reduction in fibrosis and β-catenin activation, as well as a decrease in galectin-3 expression. TD139 significantly reduced the total amount of pulmonary collagen. At the same time, the fibrosis score decreased from 3.8±0.4 to 2.6±0.3. In the absence of bleomycin, TD139 had no effect on fibrosis. [1]

Solubility Information

Solubility	H2O: 88.3 mg/mL (705.55 mM),Sonication is recommended. DMSO: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.9904 mL	39.9521 mL	79.9041 mL
5 mM	1.5981 mL	7.9904 mL	15.9808 mL
10 mM	0.799 mL	3.9952 mL	7.9904 mL
50 mM	0.1598 mL	0.799 mL	1.5981 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

Jeon SH, et al. Taurine increases cell proliferation and generates an increase in [Mg2+]i accompanied by ERK 1/2 activation in human osteoblast cells. FEBS Lett. 2007 Dec 22;581(30):5929-34.
Shivaraj MC, et al. Taurine induces proliferation of neural stem cells and synapse development in the developing mouse brain. PLoS One. 2012;7(8):e42935.
Vohra BP, Hui X. Improvement of impaired memory in mice by taurine. Neural Plast. 2000;7(4):245-59.
Pion PD, et al. Science, 1987, 237(4816), 764-768.