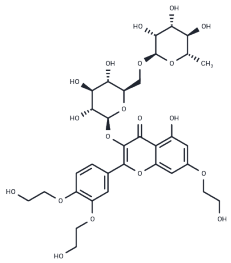
Data Sheet (Cat.No.T0772)

TargetMol

Troxerutin

Chemical Properties



CAS No. : 7085-55-4

Formula: C33H42O19

Molecular Weight: 742.68

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	Troxerutin (Trihydroxyethylrutin), a natural bioflavonoid, is isolated from Sophora japonica. It has many benefits and medicinal properties.
Targets(IC50)	NOD-like Receptor (NLR)
In vivo	Troxerutin contributes to the reduction of red blood cell aggregation and enhances microvascular perfusion, beneficially affecting complications of chronic venous insufficiency. It mitigates oxidative stress and cognitive impairment induced by D-galactose by lowering levels of protein carbonyl groups, reactive oxygen species, and advanced glycation end-products while also boosting the activation of PI3K/Akt. Additionally, troxerutin reduces the levels of α-aminoadipic acid, homocysteine, triglycerides, cholesterol, and low-density lipoprotein apolipoprotein B in patients with acute myocardial infarction.

Solubility Information

Solubility	DMSO: 262.5 mg/mL (353.45 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: 92 mg/mL (123.88 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 (2.69 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	1.3465 mL	6.7324 mL	13.4647 mL
5 mM	0.2693 mL	1.3465 mL	2.6929 mL
10 mM	0.1346 mL	0.6732 mL	1.3465 mL
50 mM	0.0269 mL	0.1346 mL	0.2693 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

Olszewski AJ, et al. Atherosclerosis, 1989, 75(1), 1-6.
Sun Y, Wu J, Shen B, et al.Discovery of TRPV4-Targeting Small Molecules with Anti-Influenza Effects Through Machine Learning and Experimental Validation.International Journal of Molecular Sciences.2025, 26(3): 1381.
Boisseau MR, et al. J Cardiovasc Surg (Torino), 1995, 36(4), 369-374.
Lu J, et al. Brain, 2011, 134(Pt 3), 783-797.
Zhang Z, et al. Troxerutin Attenuates Enhancement of Hepatic Gluconeogenesis by Inhibiting NOD Activation-Mediated Inflammation in High-Fat Diet-Treated Mice. Int J Mol Sci. 2016 Dec 25;18(1). pii: E31.