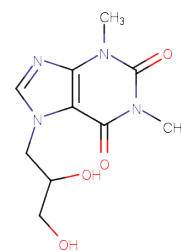


Diphylline

Chemical Properties

CAS No. :	479-18-5
Formula:	C ₁₀ H ₁₄ N ₄ O ₄
Molecular Weight:	254.24
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Diphylline (Diprophyllyne) is a xanthine derivative. Diphylline exerts bronchodilator effects and to a lesser extent vasodilator and diuretic properties. Diphylline probably acts as a competitive inhibitor of phosphodiesterase which leads to an increase in intracellular cAMP. This results in relaxation of bronchial smooth muscle and other smooth muscles. Diphylline may also antagonize adenosinereceptors. Diphylline is used in the treatment of acute bronchial asthma, chronic bronchitis and emphysema.
Targets(IC50)	PDE,Adenosine Receptor

Solubility Information

Solubility	DMSO: 48 mg/mL (188.8 mM), H ₂ O: 47 mg/mL (184.9 mM), Ethanol: <1 mg/mL, (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9333 mL	19.6665 mL	39.3329 mL
5 mM	0.7867 mL	3.9333 mL	7.8666 mL
10 mM	0.3933 mL	1.9666 mL	3.9333 mL
50 mM	0.0787 mL	0.3933 mL	0.7867 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.

Reference

Zhang Z, Zhou H, Gu W, et al.CGI1746 targets σ 1R to modulate ferroptosis through mitochondria-associated membranes.Nature Chemical Biology.2024: 1-11.

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:36 Washington Street,Wellesley Hills,MA 02481