

Thiamine pyrophosphate chloride

Chemical Properties

CAS No. : 154-87-0

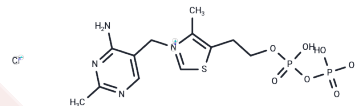
Formula: C₁₂H₁₉ClN₄O₇P₂S

Molecular Weight: 460.76

Store at low temperature

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	Thiamine pyrophosphate (Cocarcboxylase) is a vitamin B-1 derivative that acts as a coenzyme of transketolase. Thiamine pyrophosphate is used in studies to assess decarboxylation mechanisms in biological systems.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	H ₂ O: 110 mg/mL (238.74 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	2.1703 mL	10.8516 mL	21.7033 mL
5 mM	0.4341 mL	2.1703 mL	4.3407 mL
10 mM	0.217 mL	1.0852 mL	2.1703 mL
50 mM	0.0434 mL	0.217 mL	0.4341 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

M Höltershinken, A Höhling, Witte B , et al. Thiamine and its derivatives in cattle blood measured by HPLC in healthy animals, in patients suffering from CCN and in their cohorts[.]. DTW. Deutsche tierärztliche Wochenschrift, 2007, 114(6):212-218.

Foulon V , Sniekers M , Huysmans E , et al. Breakdown of 2-Hydroxylated Straight Chain Fatty Acids via Peroxisomal 2-Hydroxyphytanoyl-CoA Lyase[.]. Journal of Biological Chemistry, 2005, 280(11):9802.

Singleton. C K , Martin P R . Molecular Mechanisms of Thiamine Utilization.[.]. Current Molecular Medicine, 2001, 1 (2):-.

Molina J A , F. J. Jiménez-Jiménez, A. Hernánz, et al. Cerebrospinal fluid levels of thiamine in patients with Alzheimer's disease[.]. Journal of Neural Transmission, 2002, 109(7-8):1035-1044.

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:34 Washington Street,Wellesley Hills,MA 02481