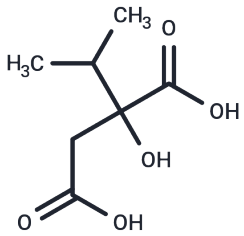
Data Sheet (Cat.No.TN6937)

TargetMol

2-Isopropylmalic acid

Chemical Properties



CAS No. : 3237-44-3

Formula: C7H12O5

Molecular Weight: 176.17

Storage: Keep away from direct sunlight,Keep away from moisture
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	2-Isopropylmalic acid (α-Isopropylmalate) inhibits excess reactive oxygen species (ROS) production and stress kinase activation in PM2. 5-treated dermal fibroblasts, promotes primary ciliogenesis and restores PM2. 5-induced primary ciliogenesis hypoplasia in dermal fibroblasts.
Targets(IC50)	Others
In vitro	500 μM 2-Isopropylmalic acid promoted LEU3 protein (Leu3p)-dependent transcriptional activity.[1] In preadipocytes (30A5), 10 mM 2-Isopropylmalic acid elevated the expression level of the reporter gene after 48 hours of action. [2]

Solubility Information

Solubility	H2O: 200 mg/mL (1135.27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.6763 mL	28.3817 mL	56.7634 mL
5 mM	1.1353 mL	5.6763 mL	11.3527 mL
10 mM	0.5676 mL	2.8382 mL	5.6763 mL
50 mM	0.1135 mL	0.5676 mL	1.1353 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

Sze JY, et al. In vitro transcriptional activation by a metabolic intermediate: activation by Leu3 depends on alpha-isopropylmalate. Science. 1992 Nov 13;258(5085):1143-5.

Guo H, et al. Regulation of transcription in mammalian cells by yeast Leu3p and externally supplied inducer. FEBS Lett. 1996 Jul 22;390(2):191-5.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481