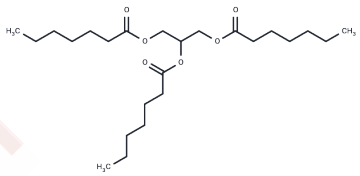
Data Sheet (Cat.No.T19663)

TargetMol

Triheptanoin

Chemical Properties



CAS No. : 620-67-7

Formula: C24H44O6

Molecular Weight: 428.6

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Triheptanoin (IND 106011) is a fatty acid metabolic modulator. It potentially for the treatment of fatty acid oxidation disorders and GLUT1.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 50 mg/mL (116.66 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 (4.67 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	2.3332 mL	11.6659 mL	23.3318 mL
5 mM	0.4666 mL	2.3332 mL	4.6664 mL
10 mM	0.2333 mL	1.1666 mL	2.3332 mL
50 mM	0.0467 mL	0.2333 mL	0.4666 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

Vockley J, Marsden D, McCracken E, DeWard S, Barone A, Hsu K, Kakkis E. Long-term major clinical outcomes in patients with long chain fatty acid oxidation disorders before and after transition to triheptanoin treatment--A retrospective chart review. Mol Genet Metab. 2015 Sep-Oct;116(1-2):53-60. doi: 10.1016/j.ymgme.2015.06.006. Review. Erratum in: Mol Genet Metab. 2015 Nov;116(3):221. PubMed PMID: 26116311.

Vockley J, Charrow J, Ganesh J, Eswara M, Diaz GA, McCracken E, Conway R, Enns GM, Starr J, Wang R, Abdenur JE, Sanchez-de-Toledo J, Marsden DL. Triheptanoin treatment in patients with pediatric cardiomyopathy associated with long chain-fatty acid oxidation disorders. Mol Genet Metab. 2016 Nov;119(3):223-231. doi: 10.1016/j.ymgme.2016.08.008. PubMed PMID: 27590926.

Schwarzkopf TM, Koch K, Klein J. Reduced severity of ischemic stroke and improvement of mitochondrial function after dietary treatment with the anaplerotic substance triheptanoin. Neuroscience. 2015 Aug 6;300:201-9. doi: 10.1016/j.neuroscience.2015.05.014. PubMed PMID: 25982559.

Nguyen TD, Shingu Y, Amorim PA, Schwarzer M, Doenst T. Triheptanoin Alleviates Ventricular Hypertrophy and Improves Myocardial Glucose Oxidation in Rats With Pressure Overload. J Card Fail. 2015 Nov;21(11):906-15. doi: 10.1016/j.cardfail.2015.07.009. PubMed PMID: 26209001.