

L-Dithiothreitol [16096-97-2]

#Cat: NB-64-09984-1mL	Size: 1mL
#Cat: NB-64-09984-25mg	Size: 25mg
#Cat: NB-64-09984-50mg	Size: 50mg
#Cat: NB-64-09984-100mg	Size: 100mg
#Cat: NB-64-09984-200mg	Size: 200mg

Chemical Properties

Cas No:	16096-97-2
Formula:	C ₄ H ₁₀ O ₂ S ₂
Molecular weight:	154.25
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year

Biological Description

Description	L-Dithiothreitol (L-Dtt) is a chiral bidentate dithiol with two stereogenic centers. It may be used in chiroptical response research.
Targets(IC ₅₀)	Others

Solubility Information

Solubility	DMSO: 55 mg/ml (356.56 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.483 mL	32.4149 mL	64.8298 mL
5 mM	1.2966 mL	6.483 mL	12.966 mL
10 mM	0.6483 mL	3.2415 mL	6.483 mL
50 mM	0.1297 mL	3.2415 mL	1.2966 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 S, Wang D, Li Y, Li L, Chen H, Xiong Q, Liu Y, Wang Y. pH- and redox-responsive nanoparticles composed of charge-reversible pullulan-based shells and disulfide-containing poly(β -amino ester) cores for co-delivery of a gene and chemotherapeutic agent. *Nanotechnology*. 2018 Aug 10;29(32):325101. doi: 10.1088/1361-6528/aac4b5. Epub 2018 May 15.

Qi C, Li Y, Yu RQ, Zhou SL, Wang XG, Le GW, Jin QZ, Xiao H, Sun J. Composition and immuno-stimulatory properties of extracellular DNA from mouse gut flora. *World J Gastroenterol*. 2017 Nov 28;23(44):7830-7839. doi: 10.3748/wjg.v23.i44.7830.

Chafik A, Essamadi A, Çelik SY, Mavi A. Purification of camel liver catalase by zinc chelate affinity chromatography and pH gradient elution: An enzyme with interesting properties. *J Chromatogr B Analyt Technol Biomed Life Sci*.

2017 Dec 1;1070:104-111. doi: 10.1016/j.jchromb.2017.10.052. Epub 2017 Oct 27.

Chen Y, Su M, Li Y, Gao J, Zhang C, Cao Z, Zhou J, Liu J, Jiang Z. Enzymatic PEG-Poly(amine-co-disulfide ester) Nanoparticles as pH- and Redox-Responsive Drug Nanocarriers for Efficient Antitumor Treatment. *ACS Appl Mater Interfaces*. 2017 Sep 13;9(36):30519-30535. doi: 10.1021/acsami.7b10148. Epub 2017 Sep 1.