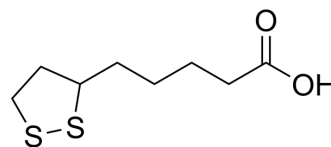


α-Lipoic Acid (Standard)

Cat. No.:	HY-N0492R
CAS No.:	1077-28-7
Molecular Formula:	C ₈ H ₁₄ O ₂ S ₂
Molecular Weight:	206.33
Target:	NF-κB; HIV; Mitochondrial Metabolism; Endogenous Metabolite; Apoptosis
Pathway:	NF-κB; Anti-infection; Metabolic Enzyme/Protease; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (484.66 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (ultrasonic) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM	4.8466 mL	24.2330 mL	48.4660 mL
	5 mM	0.9693 mL	4.8466 mL	9.6932 mL	
	10 mM	0.4847 mL	2.4233 mL	4.8466 mL	

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

α-Lipoic Acid (Standard) is the analytical standard of α-Lipoic Acid. This product is intended for research and analytical applications. α-Lipoic Acid (Thioctic acid) is an antioxidant, which is an essential cofactor of mitochondrial enzyme complexes. α-Lipoic Acid inhibits NF-κB-dependent HIV-1 LTR activation^{[1][2][3]}. α-Lipoic Acid induces endoplasmic reticulum (ER) stress-mediated apoptosis in hepatoma cells^[4]. α-Lipoic Acid can be used with [CPUL1](#) (HY-151802) to construct the self-assembled nanoaggregate CPUL1-LA NA, which has improved antitumor efficacy than CPUL1^[5].

IC₅₀ & Target

HIV-1	Human Endogenous Metabolite	NF-κB
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CUSTOMER VALIDATION

- J Nanostructure Chem. 13 May 2022.
- Virol Sin. 2021 Sep 12;1-12.

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- J Biochem Mol Toxicol. 2023 Sep 15;e23542.
 - Oxid Med Cell Longev. 2021 Jun 4.
 - Oncotarget. 2018 Jan 30;9(15):12137-12153.

See more customer validations on www.MedChemExpress.com

Caution: Product has not been fully validated for medical applications. For research use only.

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