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Lieferung & Zahlungsart

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Zuschläge

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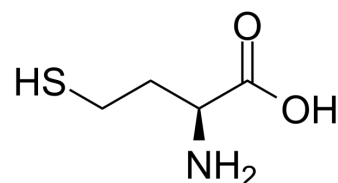
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L-Homocysteine

Cat. No.:	HY-W010347
CAS No.:	6027-13-0
Molecular Formula:	C ₄ H ₉ NO ₂ S
Molecular Weight:	135.18
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 25 mg/mL (184.94 mM; Need ultrasonic)				
	DMSO : < 1 mg/mL (insoluble or slightly soluble)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	7.3975 mL	36.9877 mL	73.9754 mL
	5 mM	1.4795 mL	7.3975 mL	14.7951 mL	
	10 mM	0.7398 mL	3.6988 mL	7.3975 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 50 mg/mL (369.88 mM); Clear solution; Need ultrasonic and warming and heat to 60°C				

BIOLOGICAL ACTIVITY

Description	L-Homocysteine, an amino acid, is a homocysteine that has L configuration. Homocysteine is an essential intermediate in normal mammalian metabolism of methionine. L-Homocysteine induces upregulation of Cathepsin V that mediates vascular endothelial inflammation in hyperhomocysteinaemia ^{[1][2]} .		
IC₅₀ & Target	Human Endogenous Metabolite		
In Vitro	L-Homocysteine (0.5, 1, 2 mM; 24 h) increases the mRNA and protein levels of Cathepsin V in a dose-dependent manner ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Western Blot Analysis ^[2]		
	Cell Line:	HUVECs	

	Concentration:	0.5, 1, 2 mM
	Incubation Time:	24 h
	Result:	Increased the mRNA and protein levels of Cathepsin V in a dose-dependent manner.
In Vivo	L-Homocysteine can be used in animal modeling to construct a model of vascular endothelial inflammation.	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

CUSTOMER VALIDATION

- SSRN. 2023 Nov 17.

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REFERENCES

- [1]. Finkelstein JD, et al. Homocysteine. Int J Biochem Cell Biol. 2000 Apr;32(4):385-9.
- [2]. Leng YP, et al. L-Homocysteine-induced cathepsin V mediates the vascular endothelial inflammation in hyperhomocysteinaemia. Br J Pharmacol. 2018 Apr;175(8):1157-1172.

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

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