Data Sheet (Cat.No.T0439)

TargetMol

L-Tryptophan

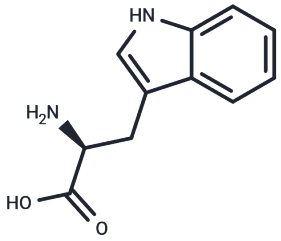
Chemical Properties

CAS No. : 73-22-3

Formula: C11H12N2O2

Molecular Weight: 204.23

Storage: 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	L-Tryptophan (Tryptophane), an essential amino acid, is necessary for normal growth in infants and for nitrogen balance in adults. It is a precursor of SEROTONIN (hence its use as an antidepressant and sleep aid) and of INDOLE ALKALOIDS in plants. It can be a precursor to NIACIN, although inefficiently in mammals.
Targets(IC50)	Amino Acids and Derivatives,Endogenous Metabolite

Solubility Information

Solubility	DMSO: 16.7 mg/mL (81.77 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: 1 mg/mL (4.9 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	4.8964 mL	24.4822 mL	48.9644 mL
5 mM	0.9793 mL	4.8964 mL	9.7929 mL
10 mM	0.4896 mL	2.4482 mL	4.8964 mL
50 mM	0.0979 mL	0.4896 mL	0.9793 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

Tsuchiya W, et al. Nucleic Acids Symp Ser (Oxf). 2004;(48):185-6.
Li Y, Zhang K, Wu Y, et al. Antigen Capture and Immune Modulation by Bacterial Outer Membrane Vesicles as In Situ Vaccine for Cancer Immunotherapy Post-Photothermal Therapy. Small. 2022, 18(14): 2107461
Li Y, Zhang K, Wu Y, et al. Antigen Capture and Immune Modulation by Bacterial Outer Membrane Vesicles as In Situ Vaccine for Cancer Immunotherapy Post-Photothermal Therapy. Small. 2022: 2107461.
Li W, Liu Y, Zheng X, et al.Rewiring Tryptophan Metabolism via Programmable Probiotic Integrated by Dual-Layered Microcapsule Protects against Inflammatory Bowel Disease in Mice.ACS nano.2024

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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