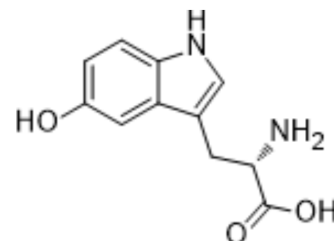


L-5-Hydroxytryptophan

| | | | |
|---------------------------|---|-------|---------|
| Cat. No.: | HY-B1716 | | |
| CAS No.: | 4350-09-8 | | |
| Molecular Formula: | C ₁₁ H ₁₂ N ₂ O ₃ | | |
| Molecular Weight: | 220.22 | | |
| Target: | Endogenous Metabolite | | |
| Pathway: | Metabolic Enzyme/Protease | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 2 years |
| | | -20°C | 1 year |



SOLVENT & SOLUBILITY

| | | | | | |
|---|---|--------------------------|--------------|------------|------------|
| In Vitro | DMSO : 12.5 mg/mL (56.76 mM; ultrasonic and warming and heat to 60°C) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 4.5409 mL | 22.7046 mL | 45.4091 mL |
| | | 5 mM | 0.9082 mL | 4.5409 mL | 9.0818 mL |
| 10 mM | | 0.4541 mL | 2.2705 mL | 4.5409 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | <ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (5.68 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (5.68 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|-------------------------------------|--|
| Description | L-5-Hydroxytryptophan (L-5-HTP), a naturally occurring amino acid and a dietary supplement for use as an antidepressant, appetite suppressant, and sleep aid, is the immediate precursor of the neurotransmitter serotonin and a reserpine antagonist ^[1] . L-5-Hydroxytryptophan (L-5-HTP) is used to treat fibromyalgia, myoclonus, migraine, and cerebellar ataxia ^[2] [3][4][5]. |
| IC₅₀ & Target | Human Endogenous Metabolite |
| In Vivo | <p>L-5-Hydroxytryptophan can be used in animal modeling to construct animal depression models.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> |

CUSTOMER VALIDATION

- Research Square Preprint. 2021 Aug.

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REFERENCES

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 - [2]. Caruso I, et al. Double-blind study of 5-hydroxytryptophan versus placebo in the treatment of primary fibromyalgia syndrome. *J Int Med Res.* 1990 May-Jun;18(3):201-9.
 - [3]. Thal LJ, et al. Treatment of myoclonus with L-5-hydroxytryptophan and carbidopa: clinical, electrophysiological, and biochemical observations. *Ann Neurol.* 1980 Jun;7(6):570-6.
 - [4]. Boiardi A, et al. 5-OH-Tryptophane in migraine: clinical and neurophysiological considerations. *J Neurol.* 1981;225(1):41-6.
 - [5]. Trouillas P, et al. Improvement of cerebellar ataxia with levorotatory form of 5-hydroxytryptophan. A double-blind study with quantified data processing. *Arch Neurol.* 1988 Nov;45(11):1217-22.
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Caution: Product has not been fully validated for medical applications. For research use only.

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