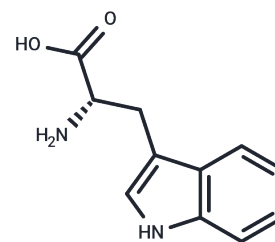


DL-Tryptophan

Chemical Properties

CAS No. :	54-12-6
Formula:	C ₁₁ H ₁₂ N ₂ O ₂
Molecular Weight:	204.23
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	DL-Tryptophan ((±)-Tryptophan) containing dipeptides are interesting ingredients for functional foods as a natural prevention for hypertension with reduced side effects due to its selective inhibition of the C-domain. Low thalamic Tryptophan uptake appears to be a strong, independent predictor of long survival in patients with previous glioma treatment.
Targets(IC50)	Serotonin Transporter,Endogenous Metabolite
In vitro	Tryptophan is an essential amino acid, required for the production of serotonin. Tryptophan represents a key element for brain functioning, because of its role as a precursor for production of neurotransmitter serotonin[2].
In vivo	In clinical conditions, which involve chronic immune system activation or under cytokine therapy, lower tryptophan levels because of high catabolism of tryptophan as indicated by the kynurenine to tryptophan ratio are common and often associate with depressive mood[2].

Solubility Information

Solubility	DMSO: 5 mg/mL (24.48 mM),Sonication and heating to 60°C are recommended. H ₂ O: Insoluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

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.

Reference

Di Pizio A, Nicoli A. In Silico Molecular Study of Tryptophan Bitterness. *Molecules*. 2020 Oct 11;25(20):4623.
Strasser B, Gostner JM, Fuchs D. Mood, food, and cognition: role of tryptophan and serotonin. *Curr Opin Clin Nutr*

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481