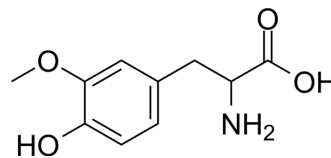


3-O-Methyl-DL-DOPA

Cat. No.:	HY-113468
CAS No.:	7636-26-2
Molecular Formula:	C ₁₀ H ₁₃ NO ₄
Molecular Weight:	211.21
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 5 mg/mL (23.67 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	4.7346 mL	23.6731 mL	47.3462 mL	
5 mM	0.9469 mL	4.7346 mL	9.4692 mL	
10 mM	0.4735 mL	2.3673 mL	4.7346 mL	

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

BIOLOGICAL ACTIVITY

Description

3-O-Methyl-DL-DOPA is an endogenous metabolite present in Cerebrospinal_Fluid that can be used for the research of Epilepsy, Purine Nucleoside Phosphorylase Deficiency and Aromatic L Amino Acid Decarboxylase Deficiency^{[1][2][3][4]}.

In Vitro

Endogenous metabolites is defined as those that are annotated by Kyoto Encyclopedia of Genes and Genomes as substrates or products of the ~1900 metabolic enzymes encoded in our genome. It is clear in the body of literature that there are documented toxic properties for many of these metabolites^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Darin N, et al. Mutations in PROSC Disrupt Cellular Pyridoxal Phosphate Homeostasis and Cause Vitamin-B6-Dependent Epilepsy. Am J Hum Genet. 2016 Dec 1;99(6):1325-1337.

[2]. Ormazabal A, et al. Pyridoxal 5'-phosphate values in cerebrospinal fluid: reference values and diagnosis of PNPO deficiency in paediatric patients. Mol Genet Metab. 2008 Jun;94(2):173-7.

[3]. Abdenur JE, et al. Aromatic l-aminoacid decarboxylase deficiency: unusual neonatal presentation and additional findings in organic acid analysis. Mol Genet Metab. 2006 Jan;87(1):48-53.

[4]. Lee N, et al. Endogenous toxic metabolites and implications in cancer therapy. Oncogene. 2020 Aug;39(35):5709-5720.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA