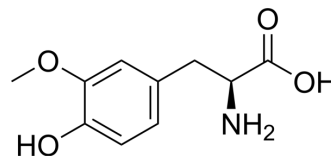


## 3-O-Methyldopa

<b>Cat. No.:</b>	HY-113468A		
<b>CAS No.:</b>	300-48-1		
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>13</sub> NO <sub>4</sub>		
<b>Molecular Weight:</b>	211.21		
<b>Target:</b>	Dopamine Receptor; Endogenous Metabolite		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	H <sub>2</sub> O : 16.67 mg/mL (78.93 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
<b>Preparing Stock Solutions</b>	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.				
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 10 mg/mL (47.35 mM); Clear solution; Need ultrasonic			

### BIOLOGICAL ACTIVITY

<b>Description</b>	3-O-Methyldopa (3-Methoxy-L-tyrosine) is a metabolite of L-DOPA which is formed by catechol-O-methyltransferase (COMT). 3-O-Methyldopa competitively inhibits the pharmacodynamics of L-DOPA and dopamine <sup>[1]</sup> .
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### REFERENCES

[1]. Masato Asanuma, et al. 3-O-Methyldopa inhibits astrocyte-mediated dopaminergic neuroprotective effects of L-DOPA. BMC Neurosci. 2016 Jul 25;17(1):52.

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

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