**Proteins** 



## Methyldopate

Cat. No.: HY-B1696 CAS No.: 6014-30-8 Molecular Formula: C<sub>12</sub>H<sub>17</sub>NO<sub>4</sub> Molecular Weight: 239.27

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture and light

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

**Product** Data Sheet

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (417.94 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.1794 mL	20.8969 mL	41.7938 mL
	5 mM	0.8359 mL	4.1794 mL	8.3588 mL
	10 mM	0.4179 mL	2.0897 mL	4.1794 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (10.45 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.45 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.45 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	Methyldopate is an ethyl ester proagent of $\alpha$ -Methyldopa ( $\alpha$ -MD; HY-B0225). Methyldopa (L-(-)- $\alpha$ -Methyldopa) is an $\alpha$ -adrenergic agonist (selective for $\alpha$ 2-adrenergic receptors). Methyldopate has the potential for severe hypertension research [1].
IC <sub>50</sub> & Target	α adrenergic receptor
In Vivo	Methyldopate is hydrolysed in vivo to methyldopa <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES
[1]. Hoskins JA, et al. Determination of alpha-methyldopa and methyldopate in human breast milk and plasma by ion-exchange chromatography using electrochemical detection. J Chromatogr. 1982 Jun 11;230(1):162-7.
[2]. P D Walson, et al. Metabolic disposition and cardiovascular effects of methyldopate in unanesthetized rhesus monkeys. J Pharmacol Exp Ther. 1975 Oct;195(1):151-8.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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