

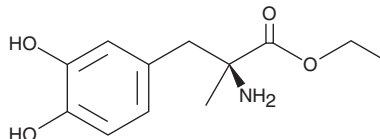
PRODUCT INFORMATION



Methyldopate

Item No. 24002

CAS Registry No.: 6014-30-8
Formal Name: 3-hydroxy- α -methyl-L-tyrosine, ethyl ester
Synonym: α -Methyldopa ethyl ester
MF: C₁₂H₁₇NO₄
FW: 239.3
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Methyldopate is supplied as a solid. A stock solution may be made by dissolving the methyldopate in the solvent of choice, which should be purged with an inert gas. Methyldopate is slightly soluble in methanol and DMSO.

Description

Methyldopate is an ethyl ester prodrug form of methyldopa (Item No. 21814), a dopamine decarboxylase inhibitor that has antihypertensive activity *in vitro* and *in vivo*.¹⁻⁴ Formulations containing methyldopate have been used in the treatment of hypertension.

References

- Xu, B., Bobek, G., Makris, A., *et al.* Antihypertensive methyldopa, labetalol, hydralazine, and clonidine reversed tumour necrosis factor- α inhibited endothelial nitric oxide synthase expression in endothelial-trophoblast cellular networks. *Clin. Exp. Pharmacol. Physiol.* **44(3)**, 421-427 (2016).
- Onesti, G., Brest, A.N., Novack, P., *et al.* Pharmacodynamic effects of alpha-methyl dopa in hypertensive subjects. *Am. Heart J.* **67(1)**, 32-38 (1964).
- LeDoux, J.E., Sakaguchi, A., and Reis, D.J. Alpha-methylDOPA dissociates hypertension, cardiovascular reactivity and emotional behavior in spontaneously hypertensive rats. *Brain Res.* **259(1)**, 69-76 (1983).
- Vlase, L., Mihiu, D., Popa, D.-S., *et al.* Determination of methyldopa in human plasma by LC/MS-MS for therapeutic drug monitoring. *Studia UBB Chemia* **57(1)**, 31-41 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/09/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM