L-(−)-α-Methyldopa
Item No. 21814

CAS Registry No.: 555-30-6
Formal Name: 3-hydroxy-α-methyl-L-tyrosine
Synonyms: Methyldopa, MK-351, NSC 169916
MF: \(\text{C}_{10}\text{H}_{13}\text{NO}_4\)
FW: 211.2
Purity: ≥98%
UV/Vis.: \(\lambda_{\text{max}}\) 224, 284 nm
Supplied as: A crystalline solid
Storage: Room temperature
Stability: ≥4 years

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

Laboratory Procedures

L-(−)-α-Methyldopa is supplied as a crystalline solid. L-(−)-α-Methyldopa is sparingly soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

L-(−)-α-Methyldopa is a dopamine (DOPA) decarboxylase inhibitor (ED\(_{50}\) = 21.8 mg/kg) and has antihypertensive activity in vitro and in vivo.\(^1\)\(^-\)\(^3\) L-(−)-α-Methyldopa enters the CNS and is metabolized to form α-methylnorepinephrine which acts as an agonist at \(\alpha_2\)-adrenergic receptors.\(^1\)\(^-\)\(^3\) Formulations containing L-(−)-α-methyldopa are used to lower blood pressure.\(^2\) L-(−)-α-Methyldopa also improves trophoblast and endothelial cellular interactions in vitro.\(^1\)

References