

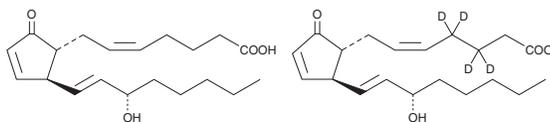
PRODUCT INFORMATION



CAY10487

Item No. 10006480

CAS Registry No.: 778624-05-8
Formal Name: N-[(2E)-3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]-L-alanine, methyl ester
Synonym: 3,4-Dihydrocinnamic Acid (L-alanine methyl ester) amide
UV/Vis.: λ_{max} : 220, 242, 297, 325 nm
MF: C₁₃H₁₅NO₅
FW: 265.3
Purity: ≥98%
Supplied as: A crystalline 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

CAY10487 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10487 in an organic solvent purged with an inert gas. CAY10487 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CAY10487 in these solvents is at least 30 mg/ml.

CAY10487 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10487 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CAY10487 has a solubility of 0.35 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The early stage of atherosclerosis is characterized by the aggregation of foam cells, so called a fatty streak, in the inner arterial wall. CAY10487 inhibits formation of fatty streak lesions of the thoracic aorta in high cholesterol-fed rabbits without affecting plasma lipid profiles or significantly inhibiting ACAT-1 or ACAT-2 activity.^{1,2} The percent area occupied by the atherosclerotic lesion in rabbits supplemented with 0.05% CAY10487 in the diet was 16.1% compared to 53.5% in control rabbits.¹ CAY10487 also exhibits antioxidant activity, inhibiting copper-mediated oxidation of low-density lipoprotein by about 75% at a concentration of 2 μ M.²

References

1. Lee, S., Lee, C.-H., Oh, J.-H., *et al.* Anti-atherogenic effects of 3,4-dihydroxy hydrocinnamides. *Bioorg. Medicinal Chem. Letters* **13**, 2681-2682 (2003).
2. Lee, S., Han, J.-M., Kim, H., *et al.* Synthesis of cinnamic acid derivatives and their inhibitory effects on LDL-oxidation, acyl-CoA: Cholesterol acyltransferase-1 and -2 activity, and decrease of HDL-particle size. *Bioorg. Medicinal Chem. Letters* **14**, 4677-4681 (2004).

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

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