

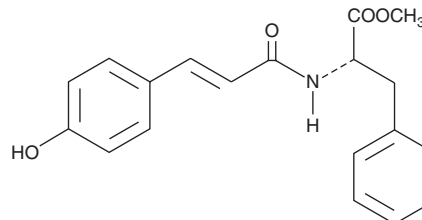
PRODUCT INFORMATION



CAY10486

Item No. 10006452

CAS Registry No.: 615264-52-3
Formal Name: N-[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]-L-phenylalanine, methyl ester
Synonym: 4-hydroxy Cinnamic Acid (L-Phenylalanine methyl ester) amide
MF: C₁₉H₁₉NO₄
FW: 325.4
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 226, 311 nm
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

CAY10486 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10486 in the solvent of choice, which should be purged with an inert gas. CAY10486 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10486 in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

CAY10486 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10486 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10486 has a solubility of approximately 0.5 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Acyl-Coenzyme A: cholesterol acyltransferase-1 and -2 (ACAT-1 and ACAT-2) catalyze the formation of cholesterol esters from cholesterol and long chain fatty acyl-coenzyme A, and may play a role in the development of atherosclerosis.^{1,2} CAY10486 inhibits human ACAT-1 and ACAT-2 equally with an IC₅₀ value of approximately 60 μM.³ It also inhibits copper-mediated oxidation of low density lipoproteins by about 28% at a concentration of 3 μM.³

References

1. Rudel, L.L., Lee, R.G., and Cockman, T.L. Acyl coenzyme A: Cholesterol acyltransferase types 1 and 2: Structure and function in atherosclerosis. *Curr. Opin. Lipidol.* **12(2)**, 121-127 (2001).
2. Lee, R.G., Willingham, M.C., Davis, M.A., et al. Differential expression of ACAT1 and ACAT2 among cells within liver, intestine, kidney, and adrenal of nonhuman primates. *J. Lipid Res.* **41(2)**, 1991-2001 (2000).
3. 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. Med. Chem. Lett.* **14(18)**, 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.

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