

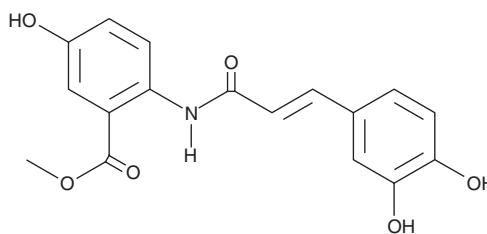
Product Information



Avenanthramide-C methyl ester

Catalog No. 10011336

CAS Registry No.: 955382-52-2
Formal Name: 2-[[[(2E)-3-(3,4-dihydroxyphenyl)-1-oxo-2-propen-1-yl]amino]5-hydroxybenzoic acid, methyl ester
MF: C₁₇H₁₅O₆N
FW: 329.3
Purity: ≥95%
Stability: ≥2 year at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that avenanthramide-c methyl ester be stored as supplied at -20°C. It should be stable for at least two years.

Avenanthramide-c methyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the avenanthramide-C methyl ester in an organic solvent purged with an inert gas. Avenanthramide-C methyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of avenanthramide-C methyl ester in these solvents is approximately 10 mg/ml in ethanol and approximately 20 mg/ml in DMSO and DMF.

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

Avenanthramide-C methyl ester is an inhibitor of NF-κB activation that acts by blocking the phosphorylation of IKK and IκB (IC₅₀ ~ 40 μM).¹ Through this mechanism, avenanthramide-C methyl ester dose dependently inhibits the expression and secretion of interleukin-6 (IL-6), IL-8, and MCP-1 in human aortic endothelial cells.¹

Reference

1. Guo, W., Wise, M.L., Collins, F.W., *et al.* Avenanthramides, polyphenols from oats, inhibit IL-1β-induced NF-κB activation in endothelial cells. *Free Radic. Biol. Med.* **44**, 415-429 (2008).

Related Products

trans-Resveratrol - Cat. No. 70675 • Celastrol - Cat. No. 70950 • Carnosol - Cat. No. 89800 • Antioxidant Assay Kit - Cat. No. 709001 • Matairesinol - Cat. No. 10005174 • NF-κB (human p50) Transcription Factor Assay Kit - Cat. No. 10006912 • NF-κB (p65) Transcription Factor Assay Kit - Cat. No. 10007889 • Didox - Cat. No. 10009081 • CAY10512 - Cat. No. 10009536 • NF-κB p50 (human recombinant) - Cat. No. 10009818

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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