PRODUCT INFORMATION



Gomisin J

Item No. 30213

CAS Registry No.:		/
Formal Name:	(6R,7S,12aS)-5,6,7,8-tetrahydro-	о́ он
	1,2,11,12-tetramethoxy-6,7-dimethyl-	
	dibenzo[a,c]cyclooctene-3,10-diol	$\langle - \rangle$
MF:	$C_{22}H_{28}O_{6}$	
FW:	388.5	
Purity:	≥98%	
UV/Vis.:	λ _{max} : 215 nm	
Supplied as:	A crystalline solid	но
Storage:	-20°C	$\langle \rangle$
Stability:	≥4 years	× ×

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

Laboratory Procedures

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

Gomisin J is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, gomisin J should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Gomisin J has a solubility of approximately 0.16 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

Gomisin J is a lignan that has been found in Schisandra chinensis and has diverse biological activities.^{1,2} It inhibits HIV-1 IIIB replication in H9 T cells (EC₅₀ = 1.5 μ g/ml).¹ Gomisin J (20 μ M) decreases LPS-induced increases in nitric oxide (NO) production and p38, ERK, and JNK phosphorylation in RAW 264.7 cells.² It induces relaxation of isolated, precontracted endothelium-intact rat aortic rings when used at concentrations of 3, 10, and 30 μ g/ml.⁴ Gomisin J is cytotoxic to 13 cancer cell lines, including breast, colon, and cervical cancer cells, when used at a concentration of 30 μ g/ml.³

References

- 1. Chen, D.-F., Zhang, S.-X., Xie, J.-X., et al. Anti-AIDS agents-XXVI. Structure-activity correlations of gomisin-G-related anti-HIV lignans from Kadsura interior and of related synthetic analogues Bioorg. Med. Chem. 5(8), 1715-1723 (1997).
- 2. Oh, S.-Y., Kim, Y.H., Bae, D.S., et al. Anti-inflammatory effects of gomisin J, and Schisandrin C isolated from the fruit of Schisandra chinensis. Biosci. Biotechnol. Biochem. 74(2), 285-291 (2010).
- Jung, S., Moon, H.-I., Kim, S., et al. Anticancer activity of gomisin J from Schisandra chinensis fruit. Oncol. Rep. 41(1), 711-717 (2019).
- 4. Park, J.Y., Hoi, Y.W., Yun, J.W., et al. Gomisin J from Schisandra chinensis induces vascular relaxation via activation of endothelial nitric oxide synthase. Vascul. Pharmacol. 57(2-4), 124-130 (2012).

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

SAFFTY 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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