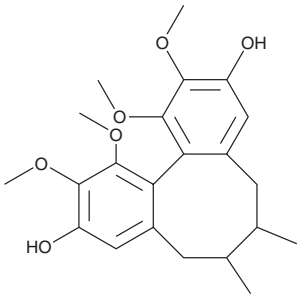
PRODUCT INFORMATION

Gomisin J

Item No. 30213

CAS Registry No.:	66280-25-9
Formal Name:	(6R,7S,12aS)-5,6,7,8-tetrahydro-1,2,11,12-tetramethoxy-6,7-dimethyl-dibenzo[a,c]cyclooctene-3,10-diol
MF:	$C_{22}H_{28}O_6$
FW:	388.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 215 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

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 (EC_{50} = 1.5 µg/ml).[1] Gomisin J (20 µM) 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 µg/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 µg/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).
3. 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).

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