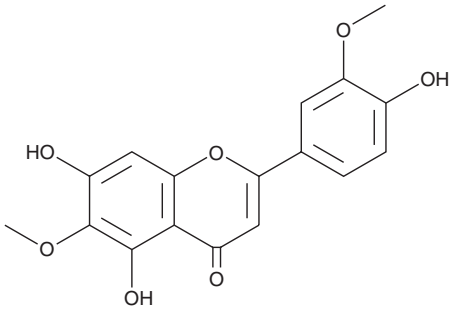
PRODUCT INFORMATION

Jaceosidin

Item No. 19758



CAS Registry No.:	18085-97-7
Formal Name:	5,7-dihydroxy-2-(4-hydroxy-3-methoxyphenyl)-6-methoxy-4H-1-benzopyran-4-one
MF:	$C_{17}H_{14}O_7$
FW:	330.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 215, 275, 346 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

Jaceosidin is supplied as a crystalline solid. A stock solution may be made by dissolving the jaceosidin in the solvent of choice, which should be purged with an inert gas. Jaceosidin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of jaceosidin in ethanol is approximately 0.2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Jaceosidin is a natural methylated trihydroxyflavone first isolated from plants of the Compositae family. Like many flavones, jaceosidin has antioxidative actions on cells in culture.[1] It induces cell cycle arrest and apoptosis in cancer cells, suggesting potential roles in cancer therapy.[2-4] Jaceosidin also blocks cell signaling related to inflammation, including activation of NF-κB and induced expression of cyclooxygenase 1, inducible nitric oxide synthase, and matrix metalloproteinase-9.[1,5]

References

1. Kim, M.-J., Han, J.-M., Jin, Y.-Y., *et al. In vitro* antioxidant and anti-inflammatory activities of Jaceosidin from *Artemisia princeps* Pampanini *cv.* Sajabal. *Arch. Pharm. Res.* **31(4)**, 42-437 (2008).
2. Lee, J.-G., Kim, J.-H., Ahn, J.-H., *et al.* Jaceosidin, isolated from dietary mugwort (*Artemisia princeps*), induces G2/M cell cycle arrest by inactivating cdc25C-cdc2 *via* ATM-Chk1/2 activation. *Food Chem. Toxicol.* **55**, 214-221 (2013).
3. Lv, W., Sheng, X., Chen, T., *et al.* Jaceosidin induces apoptosis in human ovary cancer cells through mitochondrial pathway. *J. Biomed. Biotechnol.* 394802 (2008).
4. Woo, S.M., and Kwon, T.K. Jaceosidin induces apoptosis through Bax activation and down-regulation of Mcl-1 and c-FLIP expression in human renal carcinoma Caki cells. *Chem. Biol. Interact.* **260**, 168-175 (2016).
5. Jeong, M.A., Lee, K.W., Yoon, D.-Y., *et al.* Jaceosidin, a pharmacologically active flavone derived from *Artemisia argyi*, inhibits phorbol-ester-induced upregulation of COX-2 and MMP-9 by blocking phosphorylation of ERK-1 and -2 in cultured human mammary epithelial cells. *Ann. N.Y. Acad. Sci.* **1095**, 458-466 (2007).

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