

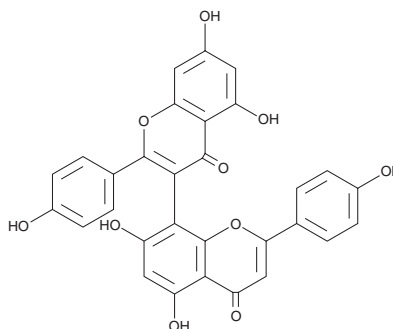
PRODUCT INFORMATION



3,8'-Biapigenin

Item No. 34143

CAS Registry No.: 101140-06-1
Formal Name: 5,5',7,7'-tetrahydroxy-2,2'-bis(4-hydroxyphenyl)-[3,8'-bi-4H-1-benzopyran]-4,4'-dione
Synonyms: I3,II8-Biapigenin, 3,8''-Biapigenin
MF: C₃₀H₁₈O₁₀
FW: 538.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/Unidentified sp.



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

Laboratory Procedures

3,8'-Biapigenin is supplied as a solid. A stock solution may be made by dissolving the 3,8'-biapigenin in the solvent of choice, which should be purged with an inert gas. 3,8'-Biapigenin is soluble in alcohol.

Description

3,8'-Biapigenin is a polyketide synthase-derived biflavonoid that has been found in *Hypericum* and has diverse biological activities.¹⁻⁵ It inhibits protein tyrosine phosphatase 1B (PTP1B; IC₅₀ = 4.5 μM) and stimulates glucose uptake in 3T3-L1 adipocyte cells when used at concentrations of 5 and 10 μM.² 3,8'-Biapigenin inhibits the cytochrome P450 (CYP) isoforms CYP3A4, CYP2C9, and CYP1A2 (K_s = 0.038, 0.32, and 0.95 μM, respectively).³ It reverses cell death induced by kainate and NMDA in isolated rat embryonic hippocampal neurons when used at a concentration of 10 μM.⁴ 3,8'-Biapigenin (8 mg/kg) decreases carrageenan-induced paw edema and protects against gastric lesions induced by indomethacin (Item No. 70270) in rats.⁵

References

1. Weng, J.-K. and Noel, J.P. Chemodiversity in *Selaginella*: A reference system for parallel and convergent metabolic evolution in terrestrial plants. *Front. Plant Sci.* **4**, 119 (2013).
2. Nguyen, P.-H., Ji, D.-J., Han, Y.-R., et al. Selaginellin and biflavonoids as protein tyrosine phosphatase 1B inhibitors from *Selaginella tamariscina* and their glucose uptake stimulatory effects. *Bioorg. Med. Chem.* **23(13)**, 3730-3737 (2015).
3. Obach, R.S. Inhibition of human cytochrome P450 enzymes by constituents of St. John's wort, an herbal preparation used in the treatment of depression. *J. Pharmacol. Exp. Ther.* **294(1)**, 88-95 (2000).
4. Silva, B., Oliveira, P.J., Dias, A.S., et al. Quercetin, kaempferol and biapigenin from *Hypericum perforatum* are neuroprotective against excitotoxic insults. *Neurotox. Res.* **13(3-4)**, 265-279 (2008).
5. Zdunić, G., Godevac, D., Milenković, M., et al. Evaluation of *Hypericum perforatum* oil extracts for an antiinflammatory and gastroprotective activity in rats. *Phytother. Res.* **23(11)**, 1559-1564 (2009).

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.

WARRANTY AND LIMITATION OF REMEDY

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