

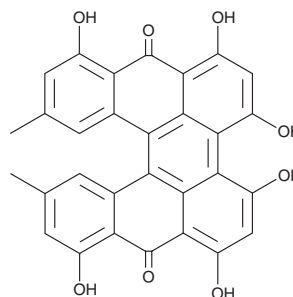
PRODUCT INFORMATION



Protohypericin

Item No. 36043

CAS Registry No.: 548-03-8
Formal Name: 1,3,4,6,8,15-hexahydroxy-10,13-dimethyl-dibenzo[a,o]perylene-7,16-dione
MF: $C_{30}H_{18}O_8$
FW: 506.5
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 213, 215 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Plant/*Hypericum perforatum* L



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

Laboratory Procedures

Protohypericin is supplied as a solid. A stock solution may be made by dissolving the protohypericin in the solvent of choice, which should be purged with an inert gas. Protohypericin is sparingly soluble (1-10 mg/ml) in methanol and DMSO.

Description

Protohypericin is a naphthodianthrone that has been found in *H. perforatum* and has anticancer activity.¹⁻³ It induces photocytotoxicity in HeLa cervical cancer cells in the presence of light with a 50% cytotoxic concentration (CC_{50}) value of $0.21 \mu\text{M}$.² *In vivo*, protohypericin labeled with ^{131}I iodine (^{131}I -protohypericin), in combination with combrestatin A4 3'-O-phosphate (Item No. 10007415), increases survival, decreases tumor volume, and induces tumor necrosis in an A549 lung cancer mouse xenograft model.³

References

1. Piperopoulos, G., Lotz, R., Wixforth, A., *et al.* Determination of naphthodianthrone in plant extracts from *Hypericum perforatum* L. by liquid chromatography-electrospray mass spectrometry. *J. Chromatogr. B Biomed. Sci. Appl.* **695**(2), 309-316 (1997).
2. Delaey, E.M., Kamuhabwa, A.R., Vandenbogaerde, A.L., *et al.* Photocytotoxicity of protohypericin after photoconversion to hypericin. *Planta Med.* **65**(8), 719-722 (1999).
3. Liu, X., Jiang, C., Zhang, D., *et al.* Tumor necrosis targeted radiotherapy of non-small cell lung cancer using radioiodinated protohypericin in a mouse model. *Oncotarget* **6**(28), 26400-26410 (2015).

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.

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