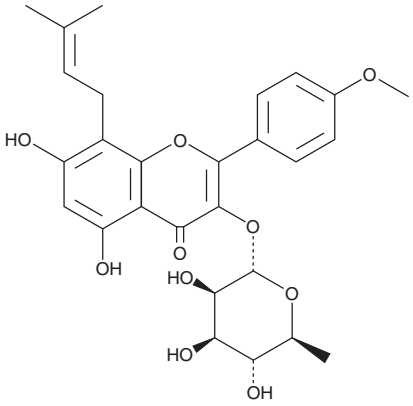
PRODUCT INFORMATION

Baohuoside I

Item No. 25062



CAS Registry No.:	113558-15-9
Formal Name:	3-[(6-deoxy-α-L-mannopyranosyl)oxy]-5,7-dihydroxy-2-(4-methoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyran-4-one
Synonym:	Icariin II, Icariside II
MF:	$C_{27}H_{30}O_{10}$
FW:	514.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 271 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years

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

Laboratory Procedures

Baohuoside I is supplied as a crystalline solid. A stock solution may be made by dissolving the baohuoside I in the solvent of choice. Baohuoside I is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of baohuoside I in ethanol is approximately 0.5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of baohuoside I can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of baohuoside I in PBS, pH 7.2, is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Baohuoside I is a flavonoid that has been isolated from *E. koreanum* and has diverse biological activities, including enzyme inhibitory, cytoprotective, neuroprotective, antiproliferative, and erectile function properties.[1-5] It inhibits human recombinant phosphodiesterase 5A1 (PDE5A1; IC_{50} = 0.16 µM) in a cell-free assay and protects PC12 rat adrenal cells from hydrogen peroxide-induced death when used at a concentration of 25 µM.[1,2] Baohuoside I inhibits the proliferation of HeLa human cervical, MM96E human melanoma, HL-60 human leukemia, and L1210 mouse leukemia cancer cells (IC_{50}s = 7.3, 7.5, 3.6, and 2.8 µg/ml, respectively).[4] It decreases hippocampal neuronal death and the latency to find the platform in the Morris water maze in a rat model of neurodegeneration induced by streptozotocin (STZ; Item No. 13104) when administered at a dose of 10 mg/kg per day.[3] Baohuoside I (10 mg/kg per day) also increases intracavernous pressure (ICP) in response to electrical stimulation of the cavernous nerve in an STZ-induced diabetic mouse model of erectile dysfunction.[5]

References

1. Dell'Agli, M., Galli, G.V., Dal Cero, E., *et al. J. Nat. Prod.* **71(9)**, 1513-1517 (2008).
2. Gao, J., Dang, Y., Yin, C., *et al. J. Cell. Mol. Med.* **21(2)**, 375-386 (2017).
3. Yin, C., Deng, Y., Gao, J., *et al. Neuroscience* **328**, 69-79 (2016).
4. Li, S.Y., Teh, B.S., Seow, W.K., *et al. Cancer Lett.* **53(2-3)**, 174-181 (1990).
5. Zhou, F., Xin, H., Liu, T., *et al. J. Androl.* **33(5)**, 832-844 (2012).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM