PRODUCT INFORMATION

(±)-8-Prenylnaringenin
Item No. 17462

CAS Registry No.: 68682-02-0
Formal Name: 2,3-dihydro-5,7-dihydroxy-2-(4-hydroxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyran-4-one
Synonym: (±)-8-PN
MF: C_{20}H_{20}O_{5}
FW: 340.4
Purity: ≥98%
UV/Vis.: λ_{max} = 294 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

(±)-8-Prenylnaringenin ((±)-8-PN) is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-8-PN in the solvent of choice. (±)-8-PN is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of (±)-8-PN in these solvents is approximately 2, 5, and 10 mg/ml, respectively.

(±)-8-PN is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (±)-8-PN should first be dissolved in DMF and then diluted with the aqueous buffer of choice. (±)-8-PN has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(±)-8-PN is a prenylflavonoid with potent estrogenic activity that can be isolated from hops.\(^1,2\) It inhibits both isoforms of the human estrogen receptor (ER; IC_{50} = 57 and 68 nM for ERα and ERβ, respectively).\(^3\) (±)-8-PN is effective in vivo, suppressing loss of bone mineral density in ovariectomized rats and blocking changes in tail skin temperature in a rat model of postmenopausal hot flashes.\(^4\)

References