PRODUCT INFORMATION

Bavachin
Item No. 11685

CAS Registry No.: 19879-32-4
Formal Name: (2S)-2,3-dihydro-7-hydroxy-2-(4-hydroxyphenyl)-6-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one
Synonym: Corylifolin
MF: C_{20}H_{20}O_{4}
FW: 324.4
Purity: ≥98%
UV/Vis: \( \lambda_{\text{max}} \): 221, 236, 278, 322 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

Bavachin is supplied as a crystalline solid. A stock solution may be made by dissolving the bavachin in the solvent of choice, which should be purged with an inert gas. Bavachin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of bavachin in these solvents is approximately 20, 30, and 50 mg/ml, respectively.

Bavachin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bavachin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Bavachin has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Bavachin is a flavonoid first isolated from seeds of *P. corylifolia*. It is a phytoestrogen that activates the estrogen receptors ER\( \alpha \) and ER\( \beta \) (EC\(_{50}\)s = 320 and 680 nM, respectively).\(^1\) Through this action, bavachin stimulates osteoblast proliferation and differentiation and prevents bone loss following ovariectomy in rats.\(^3,4\) Bavachin less potently inhibits acyl-coenzyme A:cholesterol acyltransferase (IC\(_{50}\) = 86 µM).\(^5\)

References