PRODUCT INFORMATION



Bilobalide

Item No. 14272

CAS Registry No.: 33570-04-6

Formal Name: (3aS,5aR,8aS)-9R-(1,1-dimethylethyl)-10,10aS-

dihydro-8R,9-dihydroxy-4H,5aH,9H-furo[2,3-b]

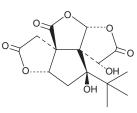
furo[3',2':2,3]cyclopenta[1,2-c]furan-

2,4,7(3H,8H)-trione

MF: $C_{15}H_{18}O_{8}$ FW: 326.3 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Ginkgo biloba L.

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



Laboratory Procedures

Bilobalide is supplied as a solid. A stock solution may be made by dissolving the bilobalide in the solvent of choice. Bilobalide is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas.

Description

Bilobalide is a sesquiterpene lactone which is found in extracts of G. biloba. It has been shown to protect against cerebral edema, decrease cortical infarct volume, and reduce cerebral ischemic damage. Bilobalide, at 10 μ M, reduces the release of glycine and glutamate from hippocampal slices under ischemic conditions.^{2,3} It also activates the rat constitutive androstane receptor at 100 μM and increases the levels and activities of several cytochrome P450 isoforms in rat liver microsomes.^{4,5}

References

- 1. Defeudis, F.V. Bilobalide and neuroprotection. Pharmacol. Res. 46(6), 565-568 (2002).
- 2. Kiewert, C., Kumar, V., Hildmann, O., et al. Role of glycine receptors and glycine release for the neuroprotective activity of bilobalide. Brain Res. 1201, 143-150 (2008).
- 3. Lang, D., Kiewert, C., Mdzinarishvili, A., et al. Neuroprotective effects of bilobalide are accompanied by a reduction of ischemia-induced glutamate release in vivo. Brain Res. 1425, 155-163 (2011).
- 4. Lau, A.J., Yang, G., Rajaraman, G., et al. Species-dependent and receptor-selective action of bilobalide on the function of constitutive androstane receptor and pregnane X receptor. Drug Metab. Dispos. 40(1), 178-186 (2012).
- 5. Deng, Y., Bi, H.-C., Zhao, L.-Z., et al. Induction of cytochrome P450s by terpene trilactones and flavonoids of the Ginkgo biloba extract EGb 761 in rats. Xenobiotica 38(5), 465-481 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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