PRODUCT INFORMATION



Ginkgolide K

Item No. 35304

CAS Registry No.: 153355-70-5

Formal Name: (1R,3S,3aS,4R,6aR,7aS,10aR,11R,11aR)-3-(1,1-

> dimethylethyl)-2,3,10a,11-tetrahydro-4,11dihydroxy-8-methyl-9H-1,7a-(epoxymethano)-1H,6aH-cyclopenta[c]furo[2,3-b]furo[3',2':3,4] cyclopenta[1,2-d]furan-5,9,12(4H)-trione

MF: $C_{20}H_{22}O_{9}$ FW: 406.4 **Purity:** ≥98% Supplied as: A solid -20°C Storage:

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

Ginkgolide K is supplied as a solid. A stock solution may be made by dissolving the ginkgolide K in the solvent of choice, which should be purged with an inert gas. Ginkgolide K is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

Description

Ginkgolide K is a terpene trilactone that has been found in G. biloba and has diverse biological activities. 1-3 It reduces corpus callosum demyelination, increases the distance traveled in the elevated plus maze, and reduces immobility time in the forced swim test in mice in a model of cuprizone-induced demyelination when administered at a dose of 20 mg/kg per day.² Ginkgolide K (4 and 8 mg/kg) reduces infarct volume, improves neurological deficits, reverses decreases in superoxide dismutase (SOD) activity, and reverses increases in the levels of malondialdehyde (MDA) and nitric oxide (NO) in cerebral ischemic sections and serum in a rat model of cerebral ischemia-reperfusion injury induced by middle cerebral artery occlusion (MCAO).³

References

- 1. van Beek, T.A. Ginkgolides and bilobalide: Their physical, chromatographic and spectroscopic properties. Bioorg. Med. Chem. 13(17), 5001-5012 (2005).
- 2. Li, Q.-Y., Miao, Q., Sui, R.-X., et al. Ginkgolide K supports remyelination via induction of astrocytic IGF/PI3K/Nrf2 axis. Int. Immunopharmacol. 75, 105819 (2019).
- 3. Ma, S., Yin, H., Chen, L., et al. Neuroprotective effect of ginkgolide K against acute ischemic stroke on middle cerebral ischemia occlusion in rats. J. Nat. Med. 66(1), 25-31 (2012).

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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