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## Product Data Sheet

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Product Name: 4-Hydroxybenzyl alcohol

Cat. No.: GC30896

### Chemical Properties

Cas. No. 623-05-2

SMILES OCC1=CC=C(O)C=C1

Formula C7H8O2

M.Wt 124.14

Solubility DMSO : 100 mg/mL (805.54 mM)

Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

### Background

4-Hydroxybenzyl alcohol is a phenol and an aglycone form of gastrodin that has been found in *Gastrodia* and has diverse biological activities.<sup>1,2,3,4</sup> It inhibits LPS-induced production of nitric oxide (NO) and reactive oxygen species (ROS) and decreases inducible nitric oxide synthase (iNOS), but not COX-2, levels in RAW 264.7 cells when used at concentrations of 0.5 and 1 mM.<sup>2</sup> 4-Hydroxybenzyl alcohol (1.5 and 4.5 mg/animal) reduces exudate volume and leukocyte infiltration in a rat model of carrageenan-induced air pouch inflammation, and inhibits acetic acid-induced writhing in mice when administered at doses of 50 and 100 mg/kg. It reduces infarct volume and the number of TUNEL-positive neurons in the ipsilateral cortex in a rat model of focal cerebral ischemia induced by transient middle cerebral artery occlusion (MCAO) when administered at a dose of 50 mg/kg.<sup>3</sup> 4-Hydroxybenzyl alcohol (50 and 100 mg/kg) increases the number of entries into, and the percentage of time spent in, the open arms of the elevated plus maze in mice, indicating anxiolytic-like activity.<sup>4</sup>

1.Hsieh, M.-T., Wu, C.-R., and Chen, C.-F. Gastrodin and p-hydroxybenzyl alcohol facilitate memory consolidation and retrieval, but not acquisition, on the passive avoidance task

**Caution: Product has not been fully validated for medical applications. For research use only.**

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in ratsJ. Ethnopharmacol.56(1)45-54(1997) 2.Lim, E.-J., Kang, H.-J., Jung, H.-J., et al.Anti-angiogenic, anti-inflammatory and antinociceptive activity of 4-hydroxybenzyl alcoholJ. Pharm. Pharmacol.59(9)1235-1240(2007) 3.Yu, S.-S., Zhao, J., Zheng, W.-P., et al.Neuroprotective effect of 4-hydroxybenzyl alcohol against transient focal cerebral ischemia via anti-apoptosis in ratsBrain Res.1308167-175(2010) 4.Jung, J.W., Yoon, B.H., Oh, H.R., et al.Anxiolytic-like effects of Gastrodia elata and its phenolic constituents in miceBiol. Pharm. Bull.29(2)261-265(2006)

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