

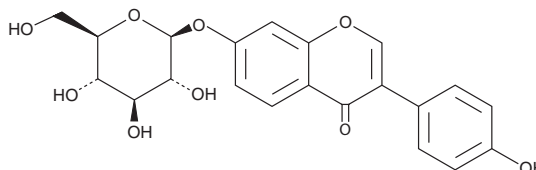
PRODUCT INFORMATION



Daidzin

Item No. 13202

CAS Registry No.: 552-66-9
Formal Name: 7-(β-D-glucopyranosyloxy)-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: Daidzioside, NPI 031D
MF: C₂₁H₂₀O₉
FW: 416.4
Purity: ≥98%
UV/Vis.: λ_{max}: 202, 231, 262 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

Daidzin is supplied as a crystalline solid. A stock solution may be made by dissolving the daidzin in the solvent of choice, which should be purged with an inert gas. Daidzin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of daidzin in ethanol is approximately 2.5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

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

Description

Daidzin is an isoflavone that occurs naturally in some plants, including soy and kudzu root. Like other isoflavones, daidzin has anti-oxidant, anti-carcinogenic, and anti-atherosclerotic activities.¹ Daidzin directly inhibits mitochondrial aldehyde dehydrogenase 2 (IC₅₀ = 80 nM) and is an effective anti-dipsotropic isoflavone.^{2,3}

References

1. Nielsen, I.L. and Williamson, G. Review of the factors affecting bioavailability of soy isoflavones in humans. *Nutr. Cancer* **57(1)**, 1-10 (2007).
2. Lowe, E.D., Gao, G.-Y., Johnson, L.N., *et al.* Structure of daidzin, a naturally occurring anti-alcohol-addiction agent, in complex with human mitochondrial aldehyde dehydrogenase. *J. Med. Chem.* **51(15)**, 4482-4487 (2008).
3. Lu, L., Liu, Y., Zhu, J., *et al.* Traditional medicine in the treatment of drug addiction. *Am. J. Drug Alcohol Abuse* **35(1)**, 1-11 (2009).

WARNING

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

SAFETY DATA

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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