

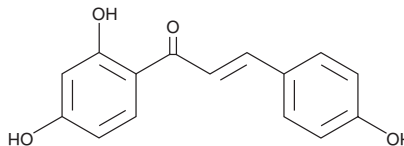
Product Information



Isoliquiritigenin

Item No. 10739

CAS Registry No.: 961-29-5
Formal Name: 1-(2E,4-dihydroxyphenyl)-3-(4-hydroxyphenyl)-2-propen-1-one
Synonyms: GU 17, ISL
MF: C₁₅H₁₂O₄
FW: 256.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that isoliquiritigenin (ISL) be stored as supplied at -20°C. It should be stable for at least two years.

ISL is supplied as a crystalline solid. A stock solution may be made by dissolving the ISL in the solvent of choice. ISL is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ISL in ethanol is approximately 5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

ISL is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ISL should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ISL has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

ISL is a flavonoid found in licorice root and several other plants that displays antioxidant, anti-inflammatory, and antitumor activities as well as hepatoprotection against steatosis-induced oxidative stress.¹⁻³ ISL induces quinone reductase-1, a phase II enzyme that deactivates radicals and electrophiles, with a concentration required to double activity (CD) value of 1.8 μM in murine hepatoma cells.²

References

1. Kim, D.-C., Choi, S.-Y.S., Kim, S.-H., *et al.* Isoliquiritigenin selectivity inhibits H2 histamine receptor signaling. *Mol. Pharmacol.* **70**(2), 493-500 (2006).
2. Cuendet, M., Oteham, S.P., Moon, R.C., *et al.* Quinone Reductase Induction as a biomarker for cancer chemoprevention. *J. Nat. Prod.* **69**(3), 460-3 (2006).
3. Kim, Y.M., Kim, T.H., Kim, Y.W., *et al.* Inhibition of liver X receptor- α -dependent hepatic steatosis by isoliquiritigenin; a licorice antioxidant flavonoid, as mediated by JNK1 inhibition. *Free Radic. Biol. Med.* **49**, 1722-34 (2010).

Related Products

trans-Resveratrol - Item No. 70675 • Genistein - Item No. 10005167 • Hesperetin - Item No. 10006084 • Apigenin - Item No. 10010275 • Myricetin - Item No. 10012600

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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