

PRODUCT INFORMATION



Salvianolic Acid B

Item No. 9001577

CAS Registry No.: 121521-90-2
Formal Name: 4-[(1E)-3-[(1R)-1-carboxy-2-(3,4-dihydroxyphenyl)ethoxy]-3-oxo-1-propen-1-yl]-2-(3,4-dihydroxyphenyl)-2,3-dihydro-7-hydroxy-3-benzofurancarboxylic acid (2S,3S)-3-[(1R)-1-carboxy-2-(3,4-dihydroxyphenyl)ethyl] ester

Synonym: Lithospermate B

MF: C₃₆H₃₀O₁₆

FW: 718.6

Purity: ≥95%

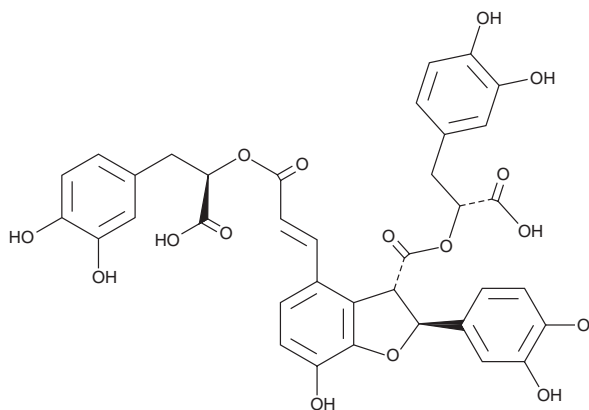
Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Plant/*Salviae Miltiorrhizae Radix et Rhizoma*

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



Laboratory Procedures

Salvianolic acid B is supplied as a crystalline solid. A stock solution may be made by dissolving the salvianolic acid B in the solvent of choice, which should be purged with an inert gas. Salvianolic acid B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of salvianolic acid B in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of salvianolic acid B can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of salvianolic acid B in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Salvianolic acid B is an antioxidant and free radical scavenging compound extracted from *S. miltiorrhiza* that has been investigated for its cardioprotective and chemopreventative properties.^{1,2} It has been reported to reduce leukocyte-endothelial adherence, inhibit inflammation and metalloproteinase expression from aortic smooth muscle cells, and regulate immune function and certain intracellular kinase associated signaling pathways by competitively inhibiting the protein-protein interactions mediated by key binding domains.^{1,3}

References

1. Ho, J.H.C. and Hong, C.Y. Salvianolic acids: Small compounds with multiple mechanisms for cardiovascular protection. *J. Biomed. Sci.* **18(1)**, 30 (2011).
2. Liu, G.T., Zhang, T.M., Wang, B.e., et al. Protective action of seven natural phenolic compounds against peroxidative damage to biomembranes. *Biochem. Pharmacol.* **43(2)**, 147-152 (1992).
3. Zhao, Y., Guo, Y., and Gu, X. Salvianolic Acid B, a potential chemopreventive agent, for head and neck squamous cell cancer. *J. Oncol.* 534548 (2011).

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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