

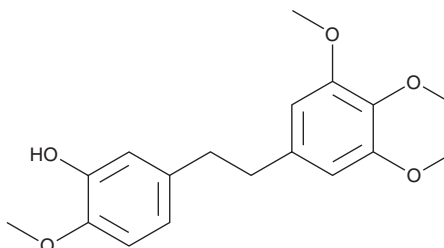
PRODUCT INFORMATION



Erianin

Item No. 32516

CAS Registry No.: 95041-90-0
Formal Name: 2-methoxy-5-[2-(3,4,5-trimethoxyphenyl)ethyl]-phenol
Synonym: NSC 613744
MF: C₁₈H₂₂O₅
FW: 318.4
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Dendrobium*



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

Laboratory Procedures

Erianin is supplied as a crystalline solid. A stock solution may be made by dissolving the erianin in the solvent of choice, which should be purged with an inert gas. Erianin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of erianin in these solvents is approximately 5 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF.

Erianin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, erianin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Erianin has a solubility of approximately 0.11 mg/ml in a 1:8 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Erianin is a benzoyl compound that has been found in *D. chrysotoxum* and has diverse biological activities.¹⁻³ It inhibits the growth of H460 and H1299 lung cancer cells in a calcium/calmodulin-dependent manner, an effect that can be reversed by the ferroptosis inhibitor liproxstatin-1 (Item No. 17730) or ferrostatin-1 (Item No. 17729).¹ Erianin (100 mg/kg) reduces tumor volume in an H460 mouse xenograft model. It increases colon length and body weight, as well as decreases colonic inflammation and the number of colonic ulcers in a mouse model of ulcerative colitis induced by dextran sulfate (DSS; Item No. 23250).² Erianin (10 mg/kg) decreases retinal microglia accumulation, NF-κB signaling, and TNF-α mRNA expression, as well as attenuates blood-brain barrier breakdown in a mouse model of diabetic retinopathy induced by streptozotocin (STZ; Item No. 13104).³

References

1. Chen, P., Wu, Q., Feng, J., *et al.* Erianin, a novel dibenzyl compound in *Dendrobium* extract, inhibits lung cancer cell growth and migration via calcium/calmodulin-dependent ferroptosis. *Signal Transduct. Target. Ther.* **5**(1), 51 (2020).
2. Dou, D., Hu, W., Song, M., *et al.* Anti-inflammation of Erianin in dextran sulphate sodium-induced ulcerative colitis mice model via collaborative regulation of TLR4 and STAT3. *Chem. Biol. Interact.* **324**, 109089 (2020).
3. Zhang, T., Ouyang, H., Mei, X., *et al.* Erianin alleviates diabetic retinopathy by reducing retinal inflammation initiated by microglial cells *via* inhibiting hyperglycemia-mediated ERK1/2-NF-κB signaling pathway. *FASEB J.* **33**(11), 11776-11790 (2019).

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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