

PRODUCT INFORMATION



Dauricine

Item No. 42364

CAS Registry No.: 524-17-4

Formal Name: 4-[[[(1R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-isoquinolinyl]methyl]-2-[4-[[[(1R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-isoquinolinyl]methyl]phenoxy]-phenol

Synonym: NSC 36413

MF: $C_{38}H_{44}N_2O_6$

FW: 624.8

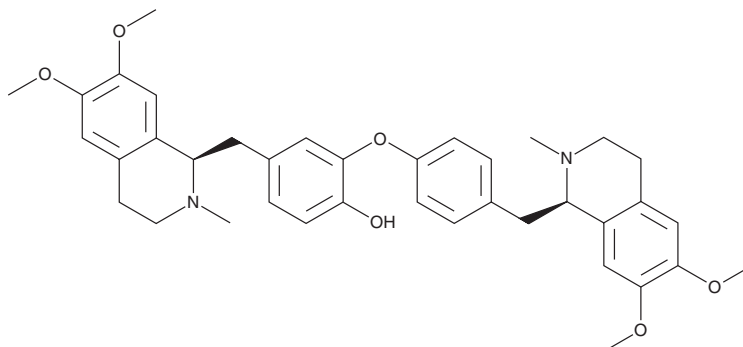
Purity: $\geq 98\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years

Item Origin: Plant/*Menispermum dauricum* DC



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

Laboratory Procedures

Dauricine is supplied as a solid. Aqueous solutions of dauricine can be prepared by directly dissolving the solid in aqueous buffers. Dauricine is slightly soluble (0.1-1 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Dauricine is an isoquinoline alkaloid that has been found in *M. dauricum* and has diverse biological activities.¹⁻³ It inhibits IL-1 β -induced THP-1 monocyte adhesion to human umbilical vein endothelial cells (HUVECs) when used at concentrations of 20 or 40 μM .¹ Dauricine (40 μM) inhibits IL-1 β -induced increases in intracellular adhesion molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), and E-selectin levels and activation of NF- κB in HUVECs. It inhibits slowly activating delayed rectifier- (I_{Ks}) and rapidly activating delayed rectifier potassium currents (I_{Kr}) in whole-cell patch-clamp assays using isolated guinea pig ventricular myocytes ($\text{IC}_{50}\text{s} = 16$ and $33 \mu\text{M}$, respectively).² Dauricine (20 μM) inhibits inward rectifying potassium channel (K_{ir}) currents in the same cells. It also inhibits copper-induced paralysis and decreases in survival in *C. elegans* when used at a concentration of 6.4 μM .³ Dauricine (20 mg/kg) increases survival in a mouse model of LPS-induced acute lung injury.¹

References

1. Hu, J., Chen, R., An, J., et al. Dauricine attenuates vascular endothelial inflammation through inhibiting NF- κB pathway. *Front. Pharmacol.* **12**, 758962 (2021).
2. Xia, J.-S., Guo, D.-L., Zhang, Y., et al. Inhibitory effects of dauricine on potassium currents in guinea pig ventricular myocytes. *Acta. Pharmacol. Sin.* **21**(1), 60-64 (2000).
3. Wang, L., Pu, Z., Li, M., et al. Antioxidative and antiapoptosis: Neuroprotective effects of dauricine in Alzheimer's disease models. *Life Sci.* **243**, 117237 (2020).

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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