

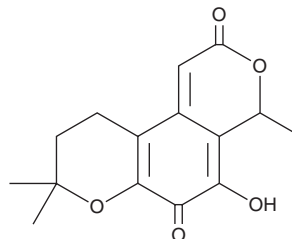
PRODUCT INFORMATION



Fuscin

Item No. 27485

CAS Registry No.: 83-85-2
Formal Name: 9,10-dihydro-5-hydroxy-4,8,8-trimethyl-2H,4H-benzo[1,2-b:4,3-c']dipyran-2,6(8H)-dione
MF: C₁₅H₁₆O₅
FW: 276.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungi



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

Laboratory Procedures

Fuscin is supplied as a solid. A stock solution may be made by dissolving the fuscin in the solvent of choice, which should be purged with an inert gas. Fuscin is soluble in the organic solvent DMSO.

Description

Fuscin is a quinonoid fungal metabolite originally isolated from *O. fuscum* that has diverse biological activities.¹⁻³ It inhibits binding of the ADP/ATP translocase inhibitor atractyloside (Item No. 44522) to rat liver mitochondria in an ADP-dependent manner when used at a concentration of 50 μM in a radioligand binding assay.¹ Fuscin (20 μM) reduces the glutathione content of rat liver mitochondria to 28% of controls and inhibits NADH oxidation in sonicated pigeon heart mitochondria preparations in a concentration-dependent manner.² It competes with macrophage inflammatory protein 1α (MIP-1α) for binding to CCR5 chemokine receptors *in vitro* with an IC₅₀ value of 21 μM.³

References

1. Vignais, P.V. and Vignais, P.M. Effect of SH reagents on atractyloside binding to mitochondria and ADP translocation. Potentiation by ADP and its prevention by uncoupler FCCP. *FEBS Lett.* **26(1)**, 27-31 (1972).
2. Vignais, P.M. and Vignais, P.V. Fuscin, an inhibitor of mitochondrial SH-dependent transport-linked functions. *Biochim. Biophys. Acta.* **325(3)**, 357-374 (1973).
3. Yoganathan, K., Rossant, C., Ng, S., *et al.* 10-Methoxydihydrofuscin, fuscinarin, and fuscin, novel antagonists of the human CCR5 receptor from *Oidiodendron griseum*. *J. Nat. Prod.* **66(8)**, 1116-1117 (2003).

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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