

PRODUCT DATA SHEET

Code No.: BIA-M2441

Pack sizes: 1 mg, 5 mg

OH O

Synonyms : (-)-(R)-Mellein, (-)-Mellein, (3R)-8-Hydroxy-3-methyl-3,4-dihydro-1H-2-benzopyran-1-one, (3R)-

Mellein, (R)-(-)-Mellein, (R)-3,4-Dihydro-8-hydroxy-3-methyl-1H-2-benzopyran-1-one, (R)-

Mellein, Mellein, Ochracin

Specifications

Mellein

CAS # : 480-33-1 Molecular Formula : $C_{10}H_{10}O_3$ Molecular Weight : 178.18

Source : Unidentified fungus

Appearance : Brown oil

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol or DMSO

Application Notes

Mellein is an isochromane produced mainly by fungi, but also plants, insects and bacteria. The structure of mellein as (-)-3,4-dihydro-8-hydroxy-3-methyl isocoumarin was confirmed in 1955. The biological activity and biosynthesis of melleins were reviewed by Evidente and colleagues, University of Università di Napoli Federico II, Italy in 2019. Mellein has a broad bioprofile, including phytotoxic, antifungal, antibacterial, antiviral, herbicidal, algicidal, larvicidal and cytotoxic activities.

References

1. Lactones. Part II. The structure of mellein. Blair J. & Newbold G.T. J Chem Soc. 1955, 708, 2871.

2. Melleins—Intriguing natural compounds. Reveglia P. et al. Biomolecules 2020, 10, 772.

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