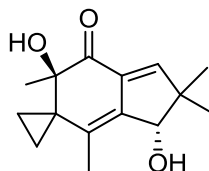


Illudin M

Code No.: **BIA-I1685**

Pack sizes: **1 mg, 5 mg**



Synonyms : Illudine M; NSC 400978; NSC 626370

Specifications

CAS #	: 1146-04-9
Molecular Formula	: C ₁₅ H ₂₀ O ₃
Molecular Weight	: 248.3
Source	: Unknown
Appearance	: Off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Illudin M is sesquiterpene isolated as the toxic principle from the basidiomycete, *Clitocybe illudens* (*Omphalotus illudens*, Jack O'lantern) by McMorris and Anchel, New York Botanical Gardens in 1965. The total synthesis of illudin M was completed by Kinder and Blair in 1994. Illudin M has potent and selective activity against mammalian tumor cells and its potential as an in vivo antitumor was intensively investigated. Illudin M acts as a bifunctional alkylating agent, reacting spontaneously with thiols, notably, glutathione or cysteine at or slightly below pH 7.

References

1. Fungal metabolites. The structures of the novel sesquiterpenoids illudin-S and -M. McMorris T.C. and Anchel M., J. Am. Chem. Soc. 1965, 87, 1594.
2. Structure-activity relationships of illudins: analogs with improved therapeutic index. McMorris T.C. et al., J. Org. Chem. 1992, 57, 6876.
3. Total synthesis of (+)-illudin M. Kinder F.R. and Blair K.W. et al., J.O.C., 1994, 59, 6965.
4. Preclinical evaluation of illudins as anticancer agents. Kelner M.J. et al., Cancer Res., 1987, 47, 3186.