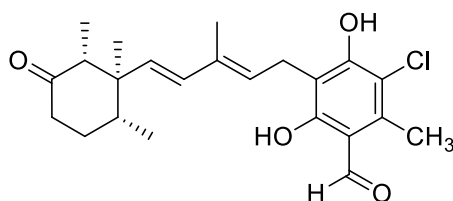


Ascochlorin

Code No.: **BIA-A1115**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : LL-Z 1272 gamma, Ilicicolin D

Specifications

CAS #	: 26166-39-2
Molecular Formula	: $C_{23}H_{29}ClO_4$
Molecular Weight	: 404.9
Source	: <i>Acremonium</i> sp.
Appearance	: White powder
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Ascochlorin is an antitumor fungal metabolite which specifically inhibits matrix metalloproteinase-9 (MMP-9) activity through suppression of activator protein-1 (AP-1)-dependent induction of MMP-9 gene expression. Via AP-1 suppression, ascochlorin selectively kills MX-1 cells, a human breast cancer cell line lacking estrogen receptors. Ascochlorin also shows activity against Newcastle disease and herpes simplex viruses.

References

1. Ascochlorin inhibits matrix metalloproteinase-9 expression by suppressing activator protein-1-mediated gene expression through the ERK1/2 signaling pathway: inhibitory effects of ascochlorin on the invasion of renal carcinoma cells. Hong S. et al., J. Biol. Chem. 2005, 280, 25202.
2. Selective cytotoxicity of ascochlorin in ER-negative human breast cancer cell lines. Sakaguchi K. et al., Biochem. Biophys. Res. Commun. 2005, 329, 46.
3. Ascochlorin derivatives as ligands for nuclear hormone receptors. Togashi M. et al., J. Med. Chem. 2003, 46, 4113.