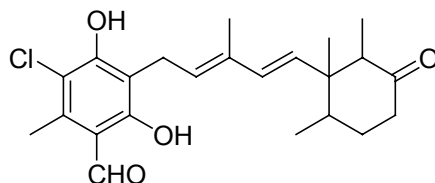


Ascochlorin

Code: **BIA-A1115**

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



Synonyms : **Antibiotic LL-Z 1272 γ**

Specifications

CAS # : **26166-39-2**
Molecular Formula : **C₂₃H₂₉ClO₄**
Molecular Weight : **404.9**
Source : ***Acremonium* sp. MST-FP1890**
Appearance : **Light grey powder**
Purity : **> 95% by HPLC**
Long Term Storage : **-4°C**
Solubility : **Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

The antitumor, fungal metabolite ascochlorin 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.