

Product Name:	Ascochlorin
Product Number:	A105
CAS Number:	26166-39-2
Molecular Formula:	$C_{23}H_{29}ClO_4$
Molecular Weight:	404.9
Appearance:	White powder
Storage Conditions:	-20°C
Description:	<p>Ascochlorin is an antitumor fungal metabolite with antitumor and antiviral properties.</p> <p>Ascochlorin is soluble in ethanol, methanol, DMF and DMSO and has limited water solubility.</p>
Mechanism of Action:	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.
References:	<p>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.</p> <p>Selective cytotoxicity of ascochlorin in ER-negative human breast cancer cell lines. Sakaguchi K. et al. Biochem. Biophys. Res. Commun. 2005, 329, 46.</p> <p>Ascochlorin derivatives as ligands for nuclear hormone receptors. Togashi M. et al. J. Med. Chem. 2003, 46, 4113.</p>