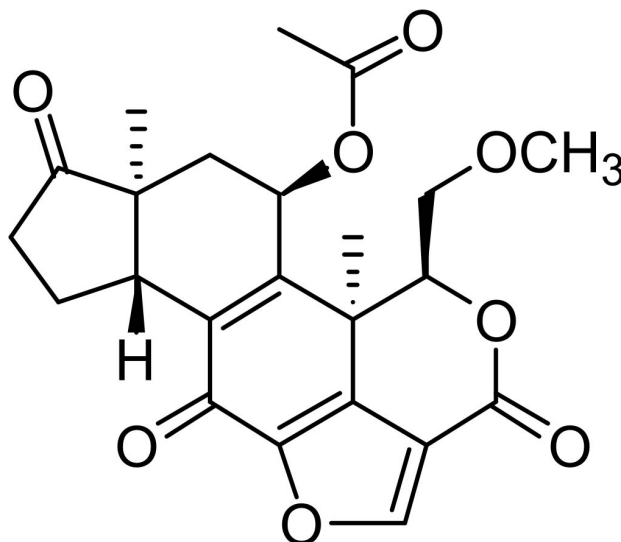


Wortmannin

Code No.: BIA-W1224

Pack sizes.: 1mg, 5mg



Synonyms:

KY 12420

Specifications

CAS #	: 19545-26-7
Molecular Formula	: C23H24O8
Molecular Weight	: 428.4
Source	: -
Appearance	: White solid
Purity	: >98% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Wortmannin is a steroidal metabolite belonging to the viridin group, isolated from *Penicillium wortmannii* in 1957. The structure was finally solved in 1968. Wortmannin exhibits broad spectrum antifungal activity, together with antitumor and antiinflammatory activity. Wortmannin is a potent inhibitor of phosphoinositide 3-kinase and myosin light chain kinase. Wortmannin also activates neutrophil and formyl-Met-Leu-Phe-mediated phospholipase D, inhibits autophagy, potentiates LPS-induced NO production and induces Alzheimer-like hyperphosphorylation in tau in vivo.

References

1. The structure of wortmannin, a steroidal fungal metabolite. MacMillan J. et al., Chem. Commun. 1968, 613.

2. Activation of human neutrophil phospholipase D by three separable mechanisms. Reinhold S. et al., *FASEB J.* 1990, 4, 208.
3. Demethoxyviridin and wortmannin block phospholipase C and D activation in the human neutrophil. Bonser R.W. et al., *Br. J. Pharmacol.* 1991, 103, 1237.
4. Wortmannin, a microbial product inhibitor of myosin light chain kinase. Nakanishi S. et al., *J. Biol. Chem.* 1992, 267, 2157.
5. Wortmannin is a potent phosphatidylinositol 3-kinase inhibitor: the role of phosphatidylinositol 3,4,5-trisphosphate in neutrophil responses. Arcaro A. & Wyman M.P., *Biochem. J.* 1993, 296, 297.