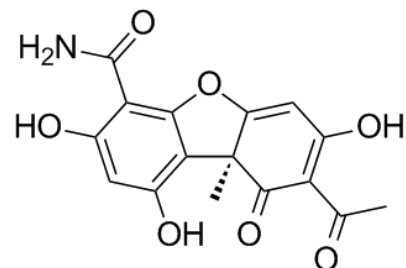


Product Name : Cercosporamide
Cat. No. : PC-45112
CAS No. : 131436-22-1
Molecular Formula : C₁₆H₁₃NO₇
Molecular Weight : 331.2769
Target : MNK
Solubility : 10 mM in DMSO



Biological Activity

Cercosporamide is a broad-spectrum natural **antifungal** compound that acts as a selective and highly potent fungal Pkc1 kinase inhibitor.

Cercosporamide potently and ATP-competitively inhibits *C. albicans* Pkc (**CaPkc1**) kinase with IC₅₀ of <40 nM, K_i of 7 nM. Cercosporamide shows potent antifungal activity with MIC of 10 µg/ml against both *C. albicans* and *A. fumigatus*.

Cercosporamide also is a potent, selective, orally bioavailable **Mnk** inhibitor with IC₅₀ of 116 nM and 11 nM for Mnk1 and Mnk2, respectively.

Cercosporamide blocks eIF4E phosphorylation in cancer cells, inducing apoptosis, suppressing proliferation, and reducing soft agar colonization.

Cercosporamide is active in tumor xenograft model.

References

Sussman A, et al. *Eukaryot Cell*. 2004 Aug;3(4):932-43.

Konicek BW, et al. *Cancer Res*. 2011 Mar 1;71(5):1849-57.

Altman JK, et al. *Blood*. 2013 May 2;121(18):3675-81.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com