

PRODUCT DATA SHEET

Cercosporamide

Code: **BIA-C1015**

Pack sizes: 0.1 mg, 0.5 mg

Synonyms :

Specifications

CAS # : 131436-22-1 Molecular Formula : $C_{16}H_{13}NO_7$ Molecular Weight : 331.3

Source : Cercosporidium sp. MST-FP1899

Appearance : Dark tan lyophilisate

Purity : > 95% by HPLC

Long Term Storage : +4°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO

Application Notes

Isolated from *Cercosporidium henningsii*, cercosporamide was originally identified as a host-selective phytotoxin and broad spectrum antifungal agent. More recently cercosporamide was shown to inhibit a cell wall integrity pathway mediated through a serine/threonine protein kinase, Pkc1, that is central to cell wall biosynthesis. It is both potent ($IC_{50} < 50 \text{ nM}$) and selective for Pkc1 kinase inhibition.

References

- 1. Discovery of cercosporamide, a known antifungal natural product, as a selective Pkc1 kinase inhibitor through high-throughput screening. Sussman A. et al. *Eukaryotic Cell* **2004**, 3, 932.
- 2. Cloning and characterization of KNR4, a yeast gene involved in (1,3)-beta-glucan synthesis. Hong Z. et al. *Mol. Cell Biol.* **1994**, 14, 1017.
- 3. The structure and biological activity of cercosporamide from *Cercosporidium henningsii*. Sugawara F. et al. *J. Org. Chem.* **1991**, 56, 909.