Leucinostatin A

Synonyms: Tryanocidin, CC 1014, M 13959, ML 1014, P 168, SF 1907VIII, U 53496

Specifications

- CAS #: 76600-38-9
- Molecular Formula: C_{62}H_{111}N_{11}O_{13}
- Molecular Weight: 1218.6
- Source: *Paecilomyces* sp.
- Appearance: Light tan to tan solid
- Purity: >95% by HPLC
- Long Term Storage: -20°C
- Solubility: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Leucinostatin A is the major component of an atypical nonapeptide complex produced by *Paecilomyces lilacinus*, first reported in 1973. Leucinostatins display broad bioactivity against Gram positive bacteria, fungi, plants and tumour cell lines. Leucinostatin A inhibits respiration by uncoupling oxidative phosphorylation and is potentiated by inhibitors such as venturicidin and oligomycin. More recently, interest in leucinostatin has focused on understanding its activity as an insulin-like growth factor I regulator, an ionophore, inhibitor of cell surface expression of viral glycoproteins and its anti-trypanosomal activity.

References

2. Isolation of leucinostatin A and one of its constituents, the new amino acid, 4-methyl-6-(2-oxobutyl)-2-piperidinecarboxylic acid, from *Paecilomyces lilacinus* A-267. Mori Y. et al. J. Antibiot. 1982, 35, 543.