

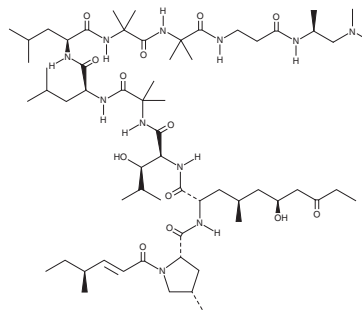
PRODUCT INFORMATION



Leucinostatin A

Item No. 28190

CAS Registry No.: 76600-38-9
Synonym: P168
MF: $C_{62}H_{111}N_{11}O_{13}$
FW: 1,218.6
Purity: $\geq 85\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years
Item Origin: Fungus/*Paecilomyces* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Leucinostatin A is supplied as a solid. A stock solution may be made by dissolving the leucinostatin A in the solvent of choice, which should be purged with an inert gas. Leucinostatin A is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Leucinostatin A is a fungal metabolite originally isolated from *P. lilacinus* with diverse biological activities.¹ It is active against *P. oryzae*, *B. cinera*, *P. chrysogenum*, *X. oryzae*, *S. cerevisiae*, and *C. albicans* fungi and *B. subtilis*, *S. aureus*, *S. lutea*, and *M. phlei* bacteria in a disc assay.¹ Leucinostatin A (0.1-1 $\mu\text{g/ml}$) reduces T cell activation induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) or an anti-CD3 antibody in a concentration-dependent manner.² It inhibits proliferation of DU145 prostate cancer cells co-cultured with PrSC stromal cells *in vitro* ($IC_{50} = 0.045 \mu\text{g/ml}$).³

References

1. Isogal, A., Suzuki, A., Higashikawa, S., *et al.* Isolation and biological activity of a peptidal antibiotic P168 *Agric. Biol. Chem.* **45(4)**, 1023-1024 (1981).
2. Csermely, P., Radics, L., Rossi, C., *et al.* The nonapeptide leucinostatin A acts as a weak ionophore and as an immunosuppressant on T lymphocytes. *Biochim. Biophys. Acta* **1221(2)**, 125-132 (1994).
3. Abe, H., Kawada, M., Sakashita, C., *et al.* Structure-activity relationship study of leucinostatin A, a modulator of tumor-stroma interaction. *Tetrahedron* **74(38)**, 5129-5137 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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