

# PRODUCT INFORMATION



## Amphotericin B methyl ester

Item No. 36342

**CAS Registry No.:** 36148-89-7  
**Formal Name:** methyl (1R,3S,5R,6R,9R,11R,15S,16R,17R,18S,19E,21E,23E,25E,27E,29E,31E,33R,35S,36R,37S)-33-(((2R,3S,4S,5S,6R)-4-amino-3,5-dihydroxy-6-methyltetrahydro-2-H-pyran-2-yl)oxy)-1,3,5,6,9,11,17,37-octahydroxy-15,16,18-trimethyl-13-oxo-14,39-dioxabicyclo[33.3.1]nonatriaconta-19,21,23,25,27,29,31-heptaene-36-carboxylate

**Synonym:** LNS-AmB methyl ester

**MF:** C<sub>48</sub>H<sub>75</sub>NO<sub>17</sub>

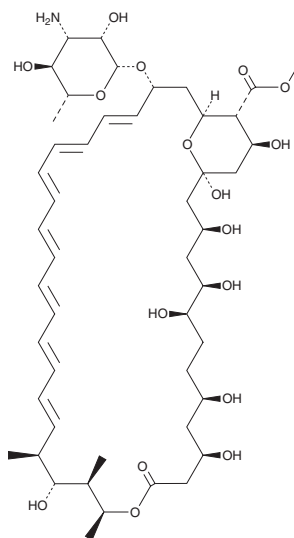
**FW:** 938.1

**Purity:** ≥70%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years



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

### Laboratory Procedures

Amphotericin B methyl ester is supplied as a solid. A stock solution may be made by dissolving the amphotericin B methyl ester in the solvent of choice, which should be purged with an inert gas. Amphotericin B methyl ester is slightly soluble in methanol and DMSO.

### Description

Amphotericin B methyl ester is a polyene antiviral and antifungal agent and a derivative of amphotericin B (Item No. 11636).<sup>1,2</sup> It impairs viral particle production, as well as viral entry and infectivity, in HIV-1-infected TZM-bl cells when used at a concentration of 10 μM.<sup>1</sup> Amphotericin B methyl ester also inhibits replication of HIV-1 clinical isolates from a variety of clades in infected human peripheral blood mononuclear cells (PBMCs; IC<sub>50</sub>s = 0.5-5.5 μM). It is active against *S. cerevisiae* (MIC = 0.25 μg/ml) and reduces mortality in a mouse model of *C. albicans* infection when administered at doses of 1 and 10 mg/kg.<sup>2</sup>

### References

1. Waheed, A.A., Ablan, S.D., Mankowski, M.K., *et al.* Inhibition of HIV-1 replication by amphotericin B methyl ester: Selection for resistant variants. *J. Biol. Chem.* **281**(39), 28699-28711 (2006).
2. Bonner, D.P., Mechliniski, W., and Schaffner, C.P. Polyene macrolide derivatives. III Biological properties of polyene macrolide ester salts. *J. Antibiot. (Tokyo)* **25**(4), 261-262 (1972).

#### 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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