



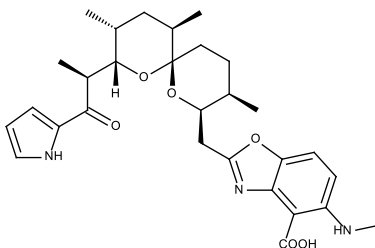
Catalog # 10-2284

A-23187

CAS# 52665-69-7

Calcimycin

Lot # X102057



Antibiotic A-23187 highly selective divalent cation ionophore, commonly used to increase intracellular Ca^{2+} levels in intact cells (though it is most selective for Mn^{2+}).¹ It uncouples oxidative phosphorylation.² In addition, A23187 inhibits ATPase activity.³

- 1) Reed and Lardy (1972) *A23187: a divalent cation ionophore*, J. Biol. Chem. **247**, 6970
- 2) Wong et al. (1973) *Effects of antibiotic ionophore, A23187, on oxidative phosphorylation and calcium transport of liver mitochondria*, Arch. Biochem. Biophys. **156** 578
- 3) Hara and Kanazawa (1986) *Selective inhibition by ionophore A23187 of the enzyme isomerization in the catalytic cycle of sarcoplasmic reticulum Ca^{2+} -ATPase*, J.Biol.Chem. **261** 16584

PHYSICAL DATA

Molecular Weight:	523.62
Molecular Formula:	$\text{C}_{29}\text{H}_{37}\text{N}_3\text{O}_6$
Purity:	>98%
Solubility:	DMSO (up to 25 mg/ml) and ethanol (up to 5 mg/mL)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Store solutions at -20°C for up to 4 months.

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