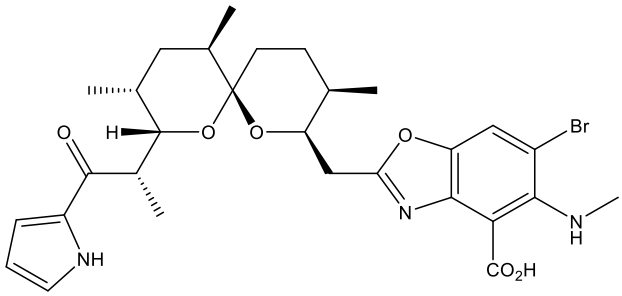
Catalog #10-5590
4-Bromo-A23187
76455-48-6
4-Bromocalcimycin; 4-Bromo-calcium ionophore A23187
Lot # X103528



Non-fluorescent analog[1] of calcium ionophore A-23187[2] which may be used in experiments employing fluorescent probes to avoid interference[3,4]. Off-target effects include uncoupling of oxidative phosphorylation[5] and inhibition of SR Ca^{2+}-ATPase[6].

1) Deber *et al.* (1985) *Bromo-A23187: A nonfluorescent calcium ionophore for use with fluorescent probes;* Anal. Biochem. **146** 349
2) Reed and Lardy (1972) *A23187: a divalent cation ionophore;* J. Biol. Chem. **247** 6970
3) Wesseling *et al.* (2016) *Phosphatidylserine Exposure in Human Red Blood Cells Depending on Cell Age;* Cell Physiol. Biochem. **38** 1376
4) Yang *et al.* (2013) *NHERF2 protein mobility rate is determined by a unique C-terminal domain that is also necessary for its regulation of NHE3 protein in OK cells;* J. Biol. Chem. **288** 16960
5) Wong *et al.* (1973) *Effects of antibiotic ionophore, A23187, on oxidative phosphorylation and calcium transport of liver mitochondria;* Arch. Biochem. Biophys. **156** 578
6) Hara and Kanazawa (1986) *Selective inhibition by ionophore A23187 of the enzyme isomerization in the catalytic cycle of sarcoplasmic reticulum Ca2+-ATPase;* J. Biol. Chem. **261** 16584

PHYSICAL DATA

Molecular Weight:	602.53
Molecular Formula:	$C_{29}H_{36}BrN_3O_6$
Purity:	>98% (HPLC) NMR: (Conforms)
Solubility:	DMSO (20 mg/ml)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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