

# PRODUCT INFORMATION



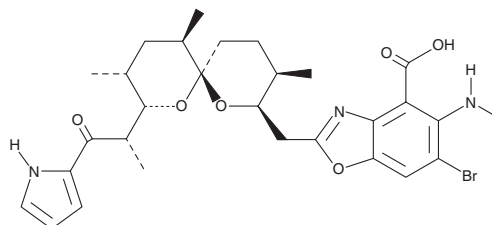
## 4-bromo A23187

Item No. 20438

**CAS Registry No.:** 76455-48-6  
**Formal Name:** 6-bromo-5-(methylamino)-2-  
[[[(2R,3R,6S,8S,9R,11R)-3,9,11-trimethyl-  
8-[(1S)-1-methyl-2-oxo-2-(1H-pyrrol-2-yl)  
ethyl]-1,7-dioxaspiro[5.5]undec-2-yl)methyl]-4-  
benzoxazolecarboxylic acid

**Synonyms:** 4-Bromocalcimycin,  
4-bromo-Calcium Ionophore A23187

**MF:** C<sub>29</sub>H<sub>36</sub>BrN<sub>3</sub>O<sub>6</sub>  
**FW:** 602.5  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 234, 305 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Special Conditions:** Avoid direct light  
**Item Origin:** Semi-synthetic



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

### Laboratory Procedures

4-bromo A23187 is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-bromo A23187 in the solvent of choice. 4-bromo A23187 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of 4-bromo A23187 in these solvents is approximately 1 and 10 mg/ml, respectively.

### Description

4-bromo A23187 is a halogenated analog of the highly selective calcium ionophore A23187 (Item No. 11016). 4-bromo A23187 is non-fluorescent.<sup>1</sup> As a result, it is often used in experiments where fluorescent probes are employed.<sup>2,3</sup>

### References

1. Deber, C. M., Tom-Kun, J., Mack, E., *et al.* Bromo-A23187: A nonfluorescent calcium ionophore for use with fluorescent probes. *Anal. Biochem.* **146(2)**, 349-352 (1985).
2. Ducreux, S., Gregory P. and Schwaller, B. Inverse regulation of the cytosolic Ca<sup>2+</sup> buffer parvalbumin and mitochondrial volume in muscle cells *via* SIRT1/PGC-1α axis. *PLoS One* **7(9)**, (2012).
3. Yang, J., Singh, V., Cha, B., *et al.* 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(23)**, 16960-16974 (2013).

#### 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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