



LKT Laboratories, Inc.

A23187 Ca-Mg

Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329

Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID A0102

CAS No.

Chemical Name

Synonym Calcium-magnesium salt of A23187, Calcium-magnesium salt of calcimycin.

Formula $(C_{29}H_{36}N_3O_6)_2Mg \cdot$

Formula Wt. 523.62

Melting Point 230° -250° C. (dec)

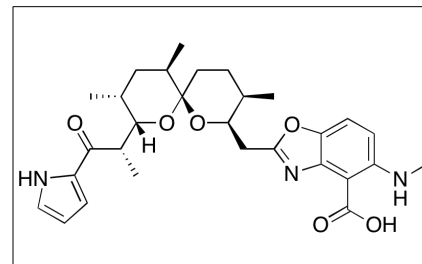
Purity ≥98%, TLC

Solubility Insoluble in water, hexane.
Slightly soluble in ethanol,
methanol. Soluble in
chloroform, acetone.

Store Temp 4° C

Ship Temp Ambient

Description A23187 is a Ca²⁺ ionophore that exhibits pro-inflammatory and allergic activities. In cardiomyocytes, A23187 induces formation of endothelial microvesicles, increasing leakage of lactate dehydrogenase and decreasing cell viability. A23187 also induces mast cell degranulation and increases production of TNF- α . In spermatozoa, this compound induces the acrosome reaction, allowing fertilization to occur in the absence of PKA activation.



Bulk quantities available upon request

Product ID	Size
A0102	5 mg
A0102	10 mg

References Kim DY, Kang TB, Shim DW, et al. Emodin attenuates A23187-induced mast cell degranulation and tumor necrosis factor- α secretion through protein kinase C and I κ B kinase 2 signaling. *Eur J Pharmacol.* 2014 Jan 15;723:501-6. PMID: 24239713.

Shang M, Zhang Q, Zhang MX, et al. Effects of endothelial microvesicles induced by A23187 on H9c2 cardiomyocytes. *Zhongguo Ying Yong Sheng Li Xue Za Zhi.* 2013 Nov;29(6):559-64. PMID: 24654540.

Tateno H, Krapf D, Hino T, et al. Ca²⁺ ionophore A23187 can make mouse spermatozoa capable of fertilizing in vitro without activation of cAMP-dependent phosphorylation pathways. *Proc Natl Acad Sci U S A.* 2013 Nov 12;110(46):18543-8. PMID: 24128762.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.