



LKT Laboratories, Inc.

Oligomycin A

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Product Information

Product ID O4531

CAS No. 579-13-5

Chemical Name

Synonym

Formula $C_{45}H_{74}O_{11}$

Formula Wt. 791.06

Melting Point 148-152 °C

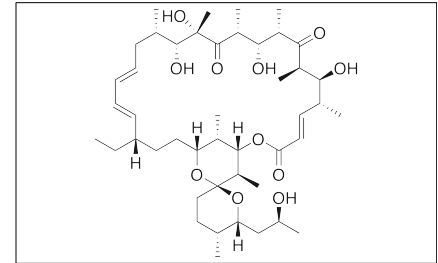
Purity ≥97%, TLC, HPLC

Solubility Soluble in DMSO, ethanol,
acetone.

Store Temp 4 °C

Ship Temp Ambient

Description Oligomycin A is a macrolide antibiotic initially produced by several species of *Streptomyces*. Oligomycin A inhibits mitochondrial F1F0 ATP synthase, binding the F0 subunit, inhibiting ATP synthesis. Oligomycin A exhibits antifungal activity against species of *Aspergillus*, *Alternaria*, *Botrytis*, and *Phytophthora*; it also displays antibacterial efficacy against a variety of bacteria. Additionally, this compound displays anticancer potential, as it triggers inositol-requiring enzyme a (IRE1) signaling in cervical cancer cells, resulting in XBP1 splicing, CHOP expression, DR5 upregulation, and ultimately apoptosis. Oligomycin also alters expression of Bcl-2 proteins in glioma cells.



Bulk quantities available upon request

Product ID	Size
O4531	1 mg
O4531	5 mg

References He L, Jang JH, Choi HG, et al. Oligomycin A enhances apoptotic effect of TRAIL through CHOP-mediated death receptor 5 expression. *Mol Carcinog.* 2013 Feb;52(2):85-93. PMID: 23335397.

Ponnala S, Chetty C, Veeravalli KK, et al. Metabolic remodeling precedes mitochondrial outer membrane permeabilization in human glioma xenograft cells. *Int J Oncol.* 2012 Feb;40(2):509-18. PMID: 22076676.

Yang PW, Li MG, Zhao JY, et al. Oligomycins A and C, major secondary metabolites isolated from the newly isolated strain *Streptomyces diastaticus*. *Folia Microbiol (Praha).* 2010 Jan;55(1):10-6. PMID: 20336498.

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