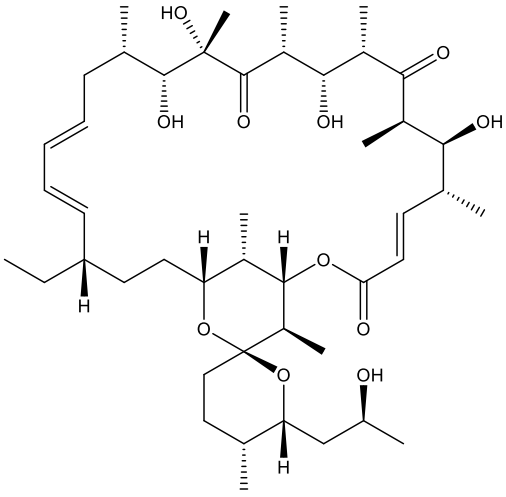
Catalog # 10-5368
Oligomycin A
CAS# 579-13-5
From *Streptomyces* sp.
Lot # X103455



Oligomycin A (OA) inhibits mitochondrial F_1F_0 ATP synthase.[1] A useful tool for decreasing cellular ATP levels.[2] Induces autophagy.[3] Evokes maximum thermogenic response from brown adipocytes upon co-treatment with norepinephrine.[4] A glycolytic inhibitor (2-deoxyglucose) enhances the antiproliferative activity of OA in MCF-7 cells.[5]

1) Antoniel *et al*. (2014), *The oligomycin-sensitivity conferring protein of mitochondrial ATP synthase: emerging new roles in mitochondrial pathophysiology*; J. Mol. Sci., **15** 7513
2) DeVorkin *et al*. (2014), *The Drosophilia effector caspase Dcp-1 regulates mitochondrial dynamics and autophagic flux via SesB*; J. Cell Biol., **205** 477
3) Serrill *et al*. (2015), *Apoptolidins A and C activate AMPK in metabolically sensitive cell types and are mechanistically distinct from oligomycin A*; Biochem. Toxicol., **93** 251
4) Meng *et al*. (2022), *A sensitive mitochondrial thermometry 2.0 and the availability of thermogenic capacity of brown adipocyte*; Front. Physiol., **13** 977431
5) Scherbakov *et al*. (2021), *Glucose starvation greatly enhances antiproliferative and antiestrogenic potency of oligomycin A in MCF-7 breast cancer cells;* Biochemie, **186** 51

PHYSICAL DATA

Molecular Weight:	791.06
Molecular Formula:	$C_{45}H_{74}O_{11}$
Purity:	>98% by TLC NMR: (Conforms)
Solubility:	DMSO (up to 300 mg/ml), or Ethanol (up to 200 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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