

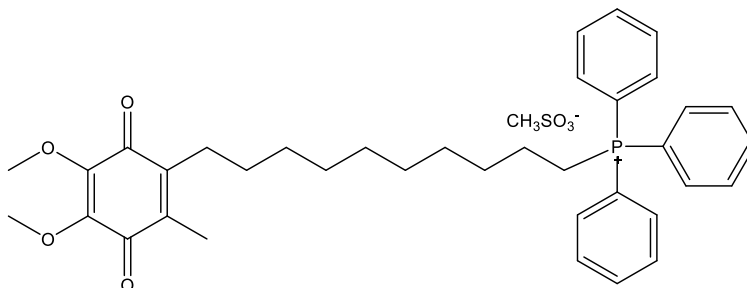
Catalog # 10-3914

Mitoquinone mesylate

CAS# 845959-50-4

10-(6'-Ubiquinonyl)decyltriphenylphosphonium mesylate

Lot # JKM1284



A mitochondria-targeted antioxidant. Displays cardio- and neuroprotective effects.¹ Displays beneficial effects in mouse models of Alzheimer's disease.^{2,3} Protects pancreatic β -cells against oxidative stress and improves insulin secretion.⁴ Inhibits respiratory syncytial virus (RSV) production via lowering of mitochondrial ROS levels.⁵ Cell permeable.

- 1) Ghosh *et al.* (2010), *Neuroprotection by a mitochondria-targeted drug in a Parkinson's disease model*; Free Radic. Biol. Med., **49** 1674
- 2) McManus *et al.* (2011), *The mitochondria-targeted antioxidant MitoQ prevents loss of spatial memory retention and early neuropathology in a transgenic mouse model of Alzheimer's disease*; J. Neurosci., **31** 15703
- 3) Young and Franklin, (2019), *The mitochondria-targeted antioxidant MitoQ inhibits memory loss, neuropathology, and extends lifespan in aged 3xTg-AD mice*; Mol. Cell Neurosci. **101** 103409
- 4) Lim *et al.* (2011), *Mitochondria-targeted antioxidants protect pancreatic β -cells against oxidative stress and improve insulin secretion in glucotoxicity and glucolipotoxicity*; Cell Physiol. Biochem., **28** 873
- 5) MengJie *et al.* (2019), *Subversion of Host Cell Mitochondria by RSV to Favor Virus Production in Dependent on Inhibition of Mitochondrial Complex I and ROS Generation*; Cells **8** 1417

PHYSICAL DATA

Molecular Weight:	678.82
Molecular Formula:	C ₃₇ H ₄₄ O ₄ P·CH ₃ SO ₃
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO
Physical Description:	Orange waxy solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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