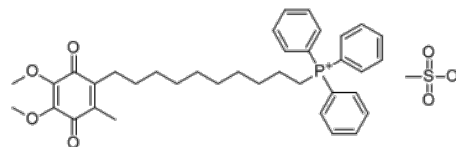


**Product Name** : Mitoquinone mesylate  
**Cat. No.** : PC-21381  
**CAS No.** : 845959-50-4  
**Molecular Formula** : C<sub>38</sub>H<sub>47</sub>O<sub>7</sub>PS  
**Molecular Weight** : 678.81  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



## Biological Activity

Mitoquinone mesylate (MitoQ) is a potent inhibitor of TRAP1 activity in cancer cells with IC<sub>50</sub> of 0.2 μM in 22Rv1 cells, reduces SDHB and SIRT3 and increases phosphor-AMPK and CHOP.

MitoQ potently disrupted the mitochondrial membrane potential (TMRM staining) and elevated ROS production (Mito-SOX staining) and consequently induced mitochondrial fragmentation and elevated cytoplasmic calcium levels in cancer cells.

MitoQ, in combination with mitoquinol, reduces malondialdehyde (MDA) levels in isolated rat liver mitochondria and decreases caspase activity in Jurkat cells.

MitoQ alleviates retinal pathologies via proteolytic HIF1α degradation, which is mediated by opening of the mitochondrial permeability transition pore and activation of calcium-dependent protease calpain-1.

## References

So-Yeon Kim, et al. Adv Sci (Weinh). 2023 Nov 20:e2302776.

Kelso GF, et al. Ann N Y Acad Sci. 2002.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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