

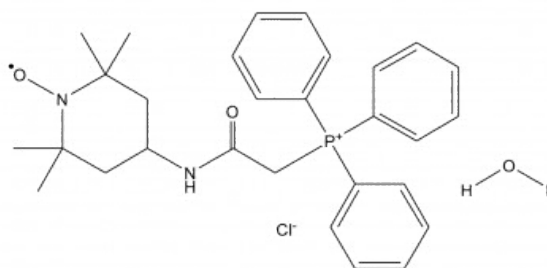
FT – 1J3740

Mito TEMPO

Mitochondria-targeted antioxidant with superoxide and alkyl radical scavenging properties, which may be used for both in vivo and in vitro experiments.

Product Description

Catalog #:	1J3740
Size :	25 mg
Name :	C₂₉H₃₅N₂O₂ClP•H₂O (2-(2,2,6,6-Tetramethylpiperidin-1-oxyl-4-ylamino)-2-oxoethyl)triphenylphosphonium chloride monohydrate MW: 528
Purity :	≥ 98% (HPLC)
Solubility :	Soluble in water (10mg/ml), methanol, 100% ethanol, and DMSO.
Storage :	Store at -20°C, protect from light.



Technical and Scientific Information

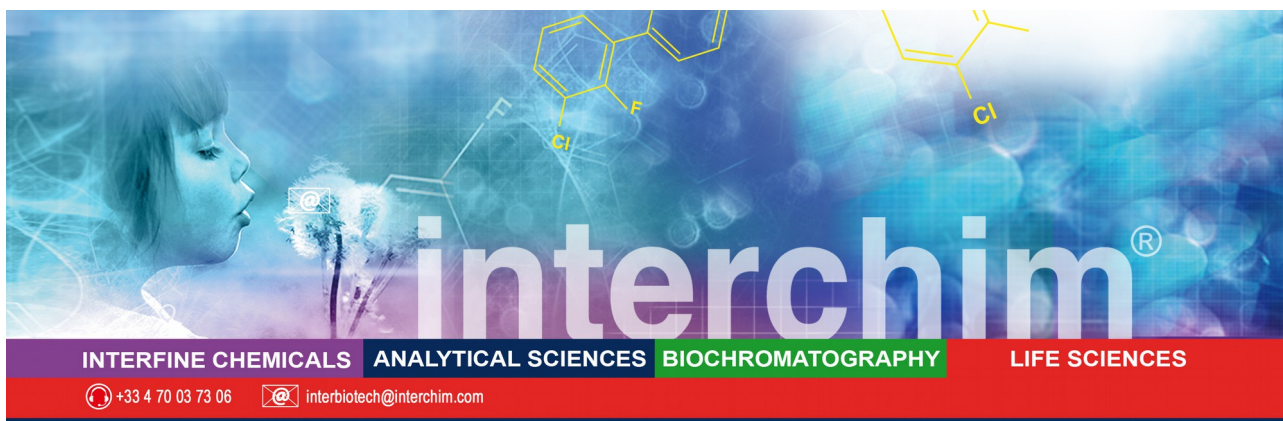
Mito TEMPO is an antioxidant that targets mitochondria and shows superoxide and alkyl radical scavenging properties. Mito TEMPO is a combination of the antioxidant piperidine nitroxide TEMPO with the lipophilic cation triphenylphosphonium, giving MitoTEMPO the ability to pass through lipid bilayers with ease and accumulate several hundred-fold in mitochondria.

References

- Murphy, Michael P., et al., 2007. Targeting antioxidants to mitochondria by conjugation to lipophilic cations. Annual review of pharmacology and toxicology. 47(): 629-56.
- Liu, Man., et al., 2010. Reactive oxygen species originating from mitochondria regulate the cardiac sodium channel. Circulation research. 107(8): 967-74.
- Liang, Huan Ling., et al., 2010. SOD1 and MitoTEMPO partially prevent mitochondrial permeability transition pore opening, necrosis, and mitochondrial apoptosis after ATP depletion recovery. Free radical biology & medicine. 49(10): 1550-60.
- Dikalov, Sergey I., et al., 2013. Angiotensin II-induced production of mitochondrial reactive oxygen species: potential mechanisms and relevance for cardiovascular disease. Antioxidants & redox signaling. 19(10): 1085-94.

Related Products

- CM-H₂DCFDA, FP-978950
- MitoROS 580 Red Mitochondrial Superoxide indicator, for live-cell imaging (510/580nm), SNX620
- MitoView Green, to stain mitochondria in both live and fixed cells, DU0750
- Rhod-2 AM, FP-661583
- Rhod-4 AM, CQ6061
- SOD Assay Kit - WST based, S07410
- ATP Assay Kit, Luminometry, Bright Glow (Luciferase based, 10-100 cells sensitivity), FN0640



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Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.
Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech – Interchim for any other information
Hotline : +33(0)4 70 03 73 06 – Interbiotech@interchim.com

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