

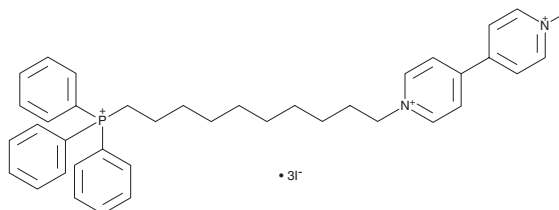
PRODUCT INFORMATION



MitoPQ

Item No. 18808

CAS Registry No.: 1821370-28-8
Formal Name: 1-methyl-1'-(10-(triphenylphosphonio)decyl)-[4,4'-bipyridine]-1,1'-diium iodide
Synonym: MitoParaquat
MF: $C_{39}H_{46}N_2P \cdot 3I$
FW: 954.5
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years
Special Conditions: Store in desiccating conditions



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

MitoPQ is supplied as a crystalline solid. A stock solution may be made by dissolving the MitoPQ in the solvent of choice. MitoPQ is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of MitoPQ in these solvents is approximately 10 and 100 mM, respectively.

Description

MitoPQ is comprised of a triphenylphosphonium lipophilic cation conjugated to the redox cyclers paraquat.¹ Driven by membrane potential, it accumulates selectively in the mitochondrial matrix where it produces superoxide by redox cycling at the flavin site of complex I.¹ Thus, MitoPQ selectively increases superoxide production within mitochondria and can be used as a tool either in cells or *in vivo* to investigate the role of mitochondrial superoxide in pathology and redox signaling.¹

Reference

1. Robb, E.L., Gawel, J.M., Aksentijevic, D., *et al.* Selective superoxide generation within mitochondria by the targeted redox cyclers MitoParaquat. *Free Radical Biology & Medicine* **89**, 883-894 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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