

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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# **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		Ň
Synonym:	MitoParaquat	$\sim$	
MF:	$C_{39}H_{46}N_{2}P \bullet 3I$		
FW:	954.5		Ň+ 'I
Purity:	≥98%		
Supplied as:	A crystalline solid		• 31-
Storage:	-20°C		
Stability:	≥2 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 cycler paraquat.<sup>1</sup> 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.<sup>1</sup> 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.<sup>1</sup>

#### Reference

1. Robb, E.L., Gawel, J.M., Aksentijevic, D., et al. Selective superoxide generation within mitochondria by the targeted redox cycler 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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