



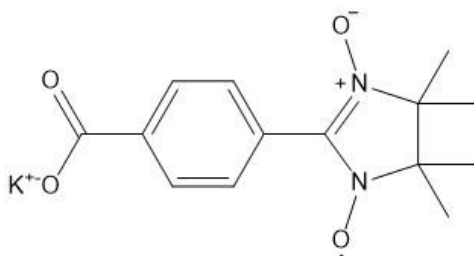
Catalog # 10-3037

Carboxy-PTIO Potassium Salt

CAS# 148819-94-7

2-(4-Carboxyphenyl)-4,4,5,5-tetramethylimidazoline-1-oxyl-3-oxide, potassium salt

Lot # X109532



A nitric oxide (NO) scavenger. Carboxy-PTIO reacts with NO with 1:1 stoichiometry¹ producing NO₂⁻/NO₃⁻. In LPS-induced endotoxin shock, carboxy-PTIO reversed hypotension and renal dysfunction and increased survival in a rat model.² A very useful tool for probing the involvement of NO in physiological processes.^{3,4}

- 1) Akaike *et al.* (1993), *Antagonistic action of imidazolineoxyl N-oxides against endothelium-derived relaxing factor/NO through a radical reaction*, *Biochemistry*, **32** 827
- 2) Yoshida *et al.* (1994), *Therapeutic effects of imidazolineoxyl N-oxide against endotoxin shock through its direct nitric oxide-scavenging activity*; *Biochem. Biophys. Res. Commun.*, **202** 923
- 3) Hada *et al.* (2019), *Nitric Oxide Is Involved in Heavy Ion-Induced Non-Targeted Effects in Human Fibroblasts*; *Int. J. Mol. Sci.*, **20** 4327
- 4) Jin *et al.* (2020), *A novel quinolinylmethyl substituted ethylenediamine compound exerts anti-cancer effects via stimulating the accumulation of reactive oxygen species and NO in hepatocellular carcinoma cells*; *Eur. J. Pharmacol.*, **885** 173497

PHYSICAL DATA

Molecular Weight:	315.39
Molecular Formula:	C ₁₄ H ₁₆ KN ₂ O ₄
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	Water (up to 100 mg/ml) or DMSO (50 mg/ml)
Physical Description:	Blue solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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