

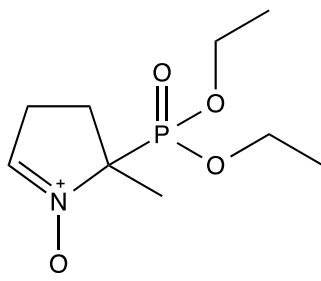
Catalog # 10-4502

DEPMPO

CAS# 157230-67-6

5-Diethoxyphosphoryl-5-methyl-1-pyrroline-N-oxide

Lot # FBA5280



DEPMPO is a spin trap capable of detecting oxygen, nitrogen, sulfur and carbon-centered free radicals both in vitro and in vivo. Useful for distinguishing between superoxide-dependent pathways of hydroxyl radical generation, and those that are superoxide independent.

- 1) Liu *et al.* (1999), *Evaluation of DEPMPO as a spin trapping agent in biological systems*; Free Radic. Biol. Med., **26** 714
- 2) Shi *et al.* (2005), *Evaluation of spin trapping agents and trapping conditions for detection of cell-generated reactive oxygen species*; Arch. Biochem. Biophys., **437** 59
- 3) Culcasi *et al.* (2012), *EPR spin trapping evaluation of ROS production in human fibroblasts exposed to cerium oxide nanoparticles: evidence for NADPH oxidase and mitochondrial stimulation*; Chem. Biol. Interact., **199** 161

PHYSICAL DATA

Molecular Weight:	235.22
Molecular Formula:	C ₉ H ₁₈ NO ₄ P
Purity:	>99% by TLC [10% Methanol in methylene chloride; R _f = 0.46] NMR: (Conforms)
Solubility:	Water or Ethanol
Physical Description:	Pale yellow oil
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Protect from exposure to air and moisture. Solutions in water or ethanol are not stable and should be made fresh each day.

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