

Catalog # 10-4523 DMNQ

2,3-Dimethoxy-1,4-naphthoquinone CAS# 6956-96-3 Lot # FBM3026



DMNQ is a non-alkylating redox cycling quinone. A useful tool for studying reactive oxidant species and oxidative stress. Cellular effects are dependent on concentration and cell type

- 1) Gant et al. (1988) Redox Cycling and Sulphydryl Arylation; Their Relative Importance in the Mechanism of Quinone Cytotoxicity to Isolated Hepatocytes Chem.-Biol. Interactions **65** 157
- 2) Stubberfield and Cohen (1989) Interconversion of NAD(H) to NADP(H). A cellular response to quinone-induced oxidative stress in isolated hepatocytes Biochem.Pharmacol. **38** 2631
- 3) Dypbukt et al (1994) Different prooxidant levels stimulate growth, trigger apoptosis or produce necreosis of insulin-secreting RINm5F cells. The role of intracellular polyamines. J.Biol.Chem. **269** 30553.
- 4) Henry and Wallace (1996) *Differential mechanisms of cell killing by redox cycling and arylating quinones Arch.Toxicol.* **70** 482

PHYSICAL DATA

Molecular Weight:	218.21
Molecular Formula:	C ₁₂ H ₁₀ O ₄
Purity:	99% (TLC: 20% Ethyl acetate/hexanes; Rf = 0.42)
	NMR: Conforms
Solubility:	DMSO(25 mg/mL); Ethanol(5 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to one year from the date of purchase. Solutions in
	DMSO may be stored at -20°C for up to 3 months

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