Datasheet for ABIN1027923

DMPO

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Overview

Quantity:	25 mg

Product Details

Purpose:	Spin trapping reagent
Characteristics:	Nitrone adduct formation.
Purity:	>98 %
Chemical Name:	2,2-Dimethyl-3,4-dihydro-2H-pyrrole 1-oxide, 5,5-Dimethyl-1-Pyrroline-N-Oxide, 3,4-dihydro-2,3-dimethyl-2H-pyrrole 1-oxide
Formula:	C6H11NO
Solubility:	Soluble to 100 mM in ethanol and to 100 mM in DMSO

Target Details

Background:	The formation of free radicals and other highly reactive oxygen species has been implicated in the pathogenesis of many disease states. The ability to identify these species is crucial, and spin trapping has accomplished this goal. DMPO (5,5-dimethyl-1-pyrroline N-oxide) is one of the least toxic to cells and animals, and possesses convenient pharmacokinetics (uptake, distribution, metabolism and excretion) in biological systems (2-6). Recent studies have determined that nitric oxide may substantially affect the quantitative determination of DMPO adducts, and therefore extra caution is required when studying generation of these species in the presence of nitric oxide or its radicals. DMPO adducts can be generated with protein and DNA radicals.
Molecular Weight:	113.16

Target Details

CAS-No:	3317-61-1

Application Details

Comment:	Source: Synthetic. Appearance: Liquid
Restrictions:	For Research Use only

Handling

Format:	Solid
Precaution of Use:	Classification: Harmful. May be harmful if inhaled, swallowed or absorbed through skin. Safety Phrases: S22 - Do not breathe dust S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection S24/25- Avoid contact with shin and eyes
Handling Advice:	Classification: Harmful. May be harmful if inhaled, swallowed or absorbed through skin. Safety Phrases: S22 - Do not breathe dust S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection S24/25- Avoid contact with shin and eyes
Storage:	-20 °C