Tempone-H

Cat. No.: HY-23033

CAS No.: 3637-11-4

Molecular Formula: $C_9H_{17}NO_2$

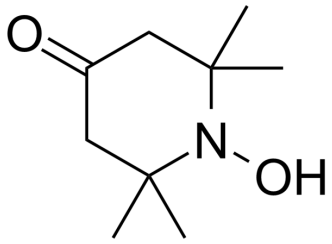
Molecular Weight: 171.24

Target: Others

Pathway: Others

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (729.97 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	5.8398 mL	29.1988 mL	58.3976 mL
	5 mM	1.1680 mL	5.8398 mL	11.6795 mL
	10 mM	0.5840 mL	2.9199 mL	5.8398 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Tempone-H may be used as a spin trap in chemical and biological systems to quantify peroxynitrite and superoxide radical formation. Ferric and cupric ions are effective oxidants of Tempone-H[1][2].

In Vitro

Using TEMPONE-H the obtained sensitivity in the detection of peroxynitrite or superoxide radicals is about 10-fold higher than using the spin traps DMPO or TMIO[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Dikalov S, et al. Quantification of peroxynitrite, superoxide, and peroxyl radicals by a new spin trap hydroxylamine 1-hydroxy-2,2,6,6-tetramethyl-4-oxo-piperidine. Biochem Biophys Res Commun. 1997 Jan 3;230(1):54-7.

[2]. Dikalov SI, et al. Amyloid beta peptides do not form peptide-derived free radicals spontaneously, but can enhance metal-catalyzed oxidation of hydroxylamines to nitroxides. J Biol Chem. 1999 Apr 2;274(14):9392-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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