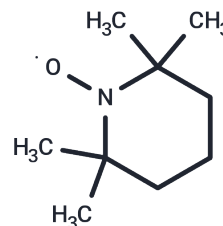


Tempo

Chemical Properties

CAS No. :	2564-83-2
Formula:	C ₉ H ₁₈ NO
Molecular Weight:	156.25
Storage:	Pure form: -20°C for 3 years In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Tempo (2,2,6,6-Tetramethylpiperidinoxy) has a wide range of applications including use as a free radical scavenger, a reagent in organic synthesis and as a structural probe in electron spin resonance spectroscopy.
Targets(IC50)	Free radical scavengers, Reactive Oxygen Species, Mitochondrial Metabolism, DNA/RNA Synthesis, ROS

Solubility Information

Solubility	DMSO: 252.5 mg/mL (1616 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (12.8 mM), Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (64 mM), Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.400 mL	32.000 mL	64.000 mL
5 mM	1.280 mL	6.400 mL	12.800 mL
10 mM	0.640 mL	3.200 mL	6.400 mL
50 mM	0.128 mL	0.640 mL	1.280 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ni H, Reitman Z J, Zou W, et al. FLASH radiation reprograms lipid metabolism and macrophage immunity and sensitizes medulloblastoma to CAR-T cell therapy. Nature Cancer. 2025: 1-14.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481