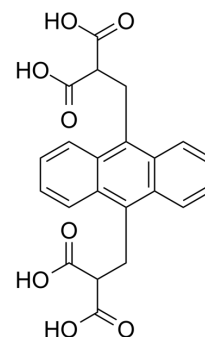


9,10-Anthracenediyl-bis(methylene)dimalonic acid

Cat. No.:	HY-D0034
CAS No.:	307554-62-7
Molecular Formula:	C ₂₂ H ₁₈ O ₈
Molecular Weight:	410.37
Target:	Fluorescent Dye
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 : 100 mg/mL (243.68 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4368 mL	12.1841 mL	24.3683 mL
	5 mM	0.4874 mL	2.4368 mL	4.8737 mL
	10 mM	0.2437 mL	1.2184 mL	2.4368 mL

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

BIOLOGICAL ACTIVITY

Description

9,10-Anthracenediyl-bis(methylene)dimalonic acid (ABMDMA) is a biological dye and indicator used to detect singlet oxygen generation (SOG). 9,10-Anthracenediyl-bis(methylene)dimalonic acid is water-soluble derivative of anthracene. 9,10-Anthracenediyl-bis(methylene)dimalonic acid can be photobleached by singlet oxygen to its corresponding endoperoxide. This reaction can be monitored spectrophotometrically by recording the decrease of absorbance at 400 nm^{[1][2]}.

REFERENCES

- [1]. M. Wojtoniszak, et al. Graphene oxide functionalized with methylene blue and its performance in singlet oxygen generation. July 2013, 48(7):2636-2639.
- [2]. Zhao B, et al. Enhanced photodynamic efficacy towards melanoma cells by encapsulation of Pc4 in silica nanoparticles. Toxicol Appl Pharmacol. 2009 Dec 1;241(2):163-72.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA