

(Z)-2-decenoic acid

Chemical Properties

CAS No.:	15790-91-7
Formula:	C ₁₀ H ₁₈ O ₂
Molecular Weight:	170.25
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	(Z)-2-decenoic acid is an unsaturated short-chain fatty acid secreted by <i>P. aeruginosa</i> . It can induce a dispersion response in biofilms formed by gram-negative and gram-positive bacteria.
-------------	---

Solubility Information

Solubility	DMSO: 30mg/mL(176.21 mM) Ethanol: 20 mg/mL (117.47 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.874 mL	29.369 mL	58.737 mL
5 mM	1.175 mL	5.874 mL	11.747 mL
10 mM	0.587 mL	2.937 mL	5.874 mL
50 mM	0.117 mL	0.587 mL	1.175 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

- Gu W, Silverman RB. Synthesis of (S)-2-Boc-Amino-8-(R)-(tert-butyldimethylsilyloxy) decanoic acid, a Precursor to the Unusual Amino Acid Residue of the Anticancer Agent Microsporin B. *Tetrahedron Lett.* 2011 Oct 19;52(42):5438-5440.
- Petelska AD, Figaszewski ZA. Interfacial tension of the lipid membrane formed from phosphatidylcholine-decanoic acid and phosphatidylcholine-decylamine systems. *J Membr Biol.* 2011 May;241(2):103-8.
- Kumar A, Singh S, Jain S, Kumar P. Synthesis, antimicrobial evaluation, QSAR and in Silico ADMET studies of decanoic acid derivatives. *Acta Pol Pharm.* 2011 Mar-Apr;68(2):191-204.
- Naumowicz M, Petelska AD, Figaszewski ZA. Impedance analysis of complex formation equilibria in phosphatidylcholine bilayers containing decanoic acid or decylamine. *Cell Biochem Biophys.* 2011 Sep;61(1):145-55.

Inhibitors · Natural Compounds · Compound Libraries

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:36 Washington Street,Wellesley Hills,MA 02481