

Product Data Sheet

N[‡] Cl⁻

N-Decyl-N,N-dimethyldecan-1-aminium chloride

Cat. No.:	HY-W04218	1			
CAS No.:	7173-51-5				
Molecular Formula:	C ₂₂ H ₄₈ CIN				
Molecular Weight:	362.08				
Target:	Bacterial; Fungal				
Pathway:	Anti-infection				
Storage:	Pure form	-20°C	3 years		
		4°C	2 years		
	In solvent	-80°C	6 months		
		-20°C	1 month		

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (276.18 mM; Need ultrasonic)						
Preparing Stock Solutions	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		1 mM	2.7618 mL	13.8091 mL	27.6182 mL		
	5 mM	0.5524 mL	2.7618 mL	5.5236 mL			
		10 mM	0.2762 mL	1.3809 mL	2.7618 mL		
	Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.90 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.90 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.90 mM); Clear solution						

BIOLOGICAL ACTIVITY					
Description	N-Decyl-N,N-dimethyldecan-1-aminium chloride (Didecyldimethylammonium chloride) is a dialkyl-quaternary ammonium compound that is used in numerous products for its bactericidal, virucidal and fungicidal properties ^[1] .				
In Vitro	N-Decyl-N,N-dimethyldecan-1-aminium chloride (Didecyldimethylammonium chloride, DDAC) is a broad-spectrum bactericidal and fungicidal biocide that exhibits antimicrobial activity against several pathogens such as Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa, Legionella pneumophilia, Stachybotrys chartarum and enveloped and non-enveloped viruses ^[1] .				

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

REFERENCES

[1]. Anderson SE, et al. Evaluation of the irritancy and hypersensitivity potential following topical application of didecyldimethylammonium chloride. J Immunotoxicol. 2016;13(4):557-566.

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