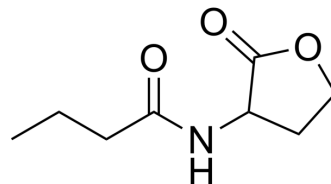


N-Butanoyl-DL-homoserine lactone

Cat. No.:	HY-113764		
CAS No.:	98426-48-3		
Molecular Formula:	C ₈ H ₁₃ NO ₃		
Molecular Weight:	171.19		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-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 (584.15 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	5.8415 mL	29.2073 mL	58.4146 mL
5 mM	1.1683 mL	5.8415 mL	11.6829 mL
10 mM	0.5841 mL	2.9207 mL	5.8415 mL

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

BIOLOGICAL ACTIVITY

Description

N-Butanoyl-DL-homoserine lactone ((Rac)-C4-HSL) is a racemic mixture of N-Butanoyl-D-homoserine lactone and N-Butanoyl-L-homoserine lactone. N-Butanoyl-L-homoserine lactone is a cleavable ADC linker used in the synthesis of antibody-drug conjugates (ADCs). N-Butanoyl-L-homoserine lactone has antibacterial activity and is used in antibacterial biofilm. N-Butanoyl-L-homoserine lactone aptamers blocks quorum sensing and inhibits biofilm formation in *Pseudomonas aeruginosa*^{[1][2]}.

REFERENCES

[1]. Zhao M, et al. C4-HSL aptamers for blocking quorum sensing and inhibiting biofilm formation in *Pseudomonas aeruginosa* and its structure prediction and analysis. PLoS One. 2019 Feb 19;14(2):e0212041.

[2]. Keith Alan Charlton, et al. Methods for the Treatment of an Infectious Bacterial Disease with an Anti-Lactone or Lactone Derived Signal Molecules Antibody. US20130045208A1

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

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