



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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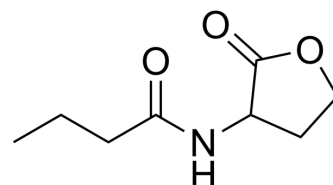
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## N-Butanoyl-DL-homoserine lactone

|                    |                                                |       |          |
|--------------------|------------------------------------------------|-------|----------|
| Cat. No.:          | HY-113764                                      |       |          |
| CAS No.:           | 98426-48-3                                     |       |          |
| Molecular Formula: | C <sub>8</sub> H <sub>13</sub> NO <sub>3</sub> |       |          |
| 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)

|                           | Solvent<br>Concentration | Mass | 1 mg      | 5 mg       | 10 mg      |
|---------------------------|--------------------------|------|-----------|------------|------------|
|                           |                          |      |           |            |            |
| Preparing Stock Solutions | 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*<sup>[1][2]</sup>.

### 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

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

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