
Product Data Sheet

Product Name: CSP1
Cat. No.: GC64061

Chemical Properties

Cas. No. 172889-49-5

Formula C103H168N30O24S

M.Wt 2242.69

Solubility H₂O : 100 mg/mL (44.59 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

CSP1 is a potent and selective ComD1 receptor agonist, with an IC₅₀ of 10.3 nM. CSP1 is a major variants of competence-stimulating peptide (CSP), and it can regulate genetic transformation of *S. pneumonia* by modulating quorum sensing (QS). CSP1 can act as an antibacterial agent[1][2].

[1]. Yang Y, et, al. Structural Characterization of Competence-Stimulating Peptide Analogues Reveals Key Features for ComD1 and ComD2 Receptor Binding in *Streptococcus pneumonia*. *Biochemistry*. 2018 Sep 11;57(36):5359-5369.

[2]. Johnsborg O, et, al. A hydrophobic patch in the competence-stimulating Peptide, a pneumococcal competence pheromone, is essential for specificity and biological activity. *J Bacteriol*. 2006 Mar; 188(5): 1744-9.

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

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