

PRODUCT DATA SHEET

Code No.: BIA-O1501

Pack sizes: 5 mg, 25 mg

Octadecanoyl-L-homoserine lactone

Synonyms : C18-HSI, N-Octadecanoyl-L-homoserine lactone

Specifications

CAS # : 479050-96-9

Molecular Formula : C₂₂H₄₁NO₃

Molecular Weight : 367.6

Source : Synthetic

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Octadecanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Sinorhizobium meliloti. Octadecanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

References

1. Characterization of the Sinorhizobium meliloti sinR/sinI locus and the production of novel N-acyl homoserine lactones. Marketon M.M. et al., J. Bacteriol. 2002, 184, 5686.

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