

ANALOGUE SET DATA SHEET

Code No.: BIA-MS5004

L-Homoserine Lactone Analogue Set

Specifications

Each set contains 1×1 mg vial of each of the following products:

Vial #	Compound	Code No.	CAS#	Mol. Formula	Mol. Wt.
1	Acetyl-L-homoserine lactone	BIA-A1493	51524-71-1	C ₆ H ₉ NO ₃	143.1
2	Butyryl-L-homoserine lactone	BIA-B1494	67605-85-0	C ₈ H ₁₃ NO ₃	171.2
3	Decanoyl-L-homoserine lactone	BIA-D1497	177315-87-6	C ₁₄ H ₂₅ NO ₃	255.4
4	Dodecanoyl-L-homoserine lactone	BIA-D1498	137173-46-7	C ₁₆ H ₂₉ NO ₃	283.4
5	Hexadecanoyl-L-homoserine lactone	BIA-H1500	87206-01-7	C ₂₀ H ₃₇ NO ₃	339.5
6	Hexanoyl-L-homoserine lactone	BIA-H1495	147852-83-3	C ₁₀ H ₁₇ NO ₃	199.3
7	Octadecanoyl-L-homoserine lactone	BIA-O1501	479050-96-9	C ₂₂ H ₄₁ NO ₃	367.6
8	Octanoyl-L-homoserine lactone	BIA-O1496	147852-84-4	C ₁₂ H ₂₁ NO ₃	227.3
9	Tetradecanoyl-L-homoserine lactone	BIA-T1499	202284-87-5	C ₁₈ H ₃₃ NO ₃	311.5

Long Term Storage : -20°C, protect from light

Stability : Stable for more than 1 year when stored at -20°C, protected from light

Short Term Storage : Stable at ambient temperature for 1-2 weeks, protected from light

Shipping : Ambient temperature

Purity : Minimum purity of >95% by HPLC

Solubility : Methanol, ethanol, DMSO, very poor water solubility

Product Description: L-Homoserine lactones comprise a family of mediators of cell to cell interactions between bacteria, notably in bacterial biofilms. When secreted by the producing bacteria, homoserine lactones modulate a diverse range of metabolic functions in surrounding species, regulating not only growth and motility but also the production of secondary metabolites such as antibiotics. The most significant variable defining the function of the homoserine lactones is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains. The L-Homoserine Lactone Analogue Set provides a series of available homoserine lactones from acetyl (C2) to octadecanoyl (C18).

Updated: 8 September 2014