

Product Name: Acetyl-L-homoserine lactone

Product Number: A147

CAS Number: 51524-71-1

Molecular Formula: $C_6H_9NO_3$

Molecular Weight: 143.1

Description: Acetyl-L-homoserine lactone is the shortest alkyl homologue and most polar of a family of mediators of cell to cell interactions in bacterial biofilms. 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. Acetyl-L-homoserine lactone is not found in nature and can serve as a polar negative control for quorum sensing events.

Acetyl-L-homoserine lactone is soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

References: Quorum sensing and *Chromobacterium violaceum*: exploitation of violacein production and inhibition for the detection of N-acylhomoserine lactones. McClean K.H. et al. Microbiology 1997, 143, 3703.