Product Information

5(S),6(R)-7-trihydroxymethyl Heptanoate
Item No. 10005032

CAS Registry No.: 78606-80-1
Formal Name: 5S,6R-7-trihydroxy-7-heptanoic acid, methyl ester
Synonym: BML-111
MF: C₈H₁₆O₅
FW: 192.2
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A solution in methanol

Laboratory Procedures
For long term storage, we suggest that 5(S),6(R)-7-trihydroxymethyl heptanoate be stored as supplied at -20. It will be stable for at least one year.

5(S),6(R)-7-trihydroxymethyl Heptanoate is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 5(S),6(R)-7-trihydroxymethyl heptanoate in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. The solubility of 5(S),6(R)-7-trihydroxymethyl heptanoate in PBS, pH 7.2, is approximately 30 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Lipoxins are trihydroxytetraene metabolites derived from arachidonic acid through an interaction between lipoxygenases with C-5 and C-15 specificities. Lipoxin A₄ (LXA₄) inhibits the chemotactic responsiveness of polymorphonuclear (PMN) neutrophils to leukotriene B₄ (LTB₄) and to the peptide formyl-methionyl-leucyl-phenylalanine (fMLP). ¹ 5(S),6(R)-7-trihydroxymethyl heptanoate is a C-7 truncated analog of LXA₄ that is equiactive with LXA₄ in the inhibition of LTB₄-induced PMN chemotaxis with an IC₅₀ value of 5 nM.¹

Reference

Related Products
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