

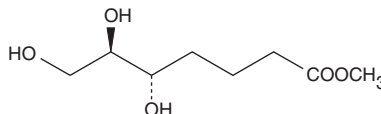
Product Information



5(S),6(R)-7-trihydroxymethyl Heptanoate

Catalog No. 10005032

Formal Name: 5S,6R-7-trihydroxy-7-heptanoic acid, methyl ester
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

1. Lee, T.H., Lympny, P., Crea, A.E.G., *et al.* Inhibition of leukotriene B₄ - induced neutrophil migration by lipoxin A₄: Structure-function relationships. *Biochem. Biophys. Res. Commun.* **180(3)**, 1416-1421 (1991).

Related Products

5(S),6(R)-Lipoxin A₄ methyl ester - Cat. No. 10033 • 5(S),6(R)-Lipoxin A₄ - Cat. No. 90410

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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