

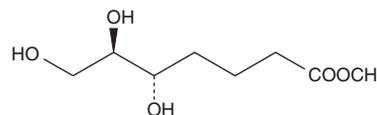
PRODUCT INFORMATION



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

Item No. 10005032

CAS Registry No.: 78606-80-1
Formal Name: 5S,6R-trihydroxy-7-heptanoic acid, methyl ester
Synonym: BML-111
MF: C₈H₁₆O₅
FW: 192.2
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

5(S),6(R)-7-trihydroxymethyl Heptanoate is supplied as a crystalline solid. A stock solution may be made by dissolving the 5(S),6(R)-7-trihydroxymethyl heptanoate in the solvent of choice, which should be purged with an inert gas. 5(S),6(R)-7-trihydroxymethyl Heptanoate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 5(S),6(R)-7-trihydroxymethyl heptanoate in these solvents is approximately 30 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. Organic solvent-free aqueous solutions of 5(S),6(R)-7-trihydroxymethyl heptanoate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 5(S),6(R)-7-trihydroxymethyl heptanoate in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

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 and to the peptide formyl-methionyl-leucyl-phenylalanine (fMLP).¹ 5(S),6(R)-7-trihydroxymethyl Heptanoate is a C-7 truncated analog of lipoxin A₄ (LXA₄) that is equiactive as LXA₄ in the inhibition of leukotriene B₄ (LTB₄)-induced polymorphonuclear neutrophils (PMN) chemotaxis with an IC₅₀ value of 5nM.¹

Reference

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

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/26/2021

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM