

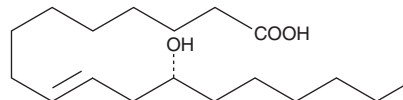
PRODUCT INFORMATION



Ricinelaidic Acid

Item No. 22470

CAS Registry No.: 540-12-5
Formal Name: 12(R)-hydroxy-9(E)-octadecenoic acid
MF: C₁₈H₃₄O₃
FW: 298.5
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Ricinelaidic acid is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of ricinelaidic acid in these solvents is approximately 2 and 3 mg/ml, respectively. Ricinelaidic acid is miscible in ethanol.

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. If an organic solvent-free solution of ricinelaidic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of ricinelaidic acid in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ricinelaidic acid is a 12-hydroxy fatty acid and an antagonist of leukotriene B₄ (LTB₄) receptors (K_i = 2 μM in porcine neutrophil membranes).¹ It inhibits chemotaxis and calcium flux induced by LTB₄ (Item No. 20110) in isolated human neutrophils (IC₅₀s = 10 and 7 μM, respectively). Ricinelaidic acid (1 mg/kg, i.v.) inhibits bronchoconstriction induced by LTB₄ in rats by 46%.

Reference

1. Yagaloff, K.A., Franco, L., Simko, B., *et al.* Essential fatty acids are antagonists of the leukotriene B₄ receptor. *Prostaglandins, Leukot. Essent. Fatty Acids* **52(5)**, 293-297 (1995).

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, 05/16/2023

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