

Product Data Sheet

Product Name: Resolvin D3

Cat. No.: GC44817

Chemical Properties

Cas. No. 916888-47-6

Chemical Name 4S,11R,17S-trihydroxy-5Z,7E,9E,13Z,15E,19Z-docosahexaenoic acid

SMILES O[C@@H](CCC(O)=O)/C=C\C=C\C=C\C[C@H](O)C/C=C\C=C\C[C@H](O)C/C=C\CC

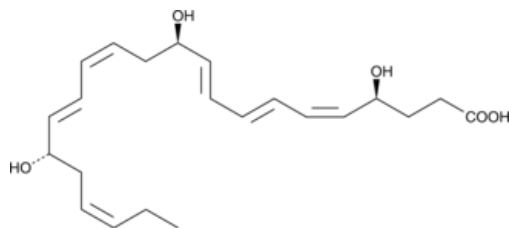
Formula C₂₂H₃₂O₅ M.Wt 376.5

Solubility 50 mg/ml in DMF, 50 mg/ml Ethanol Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Resolvins are a family of potent lipid mediators derived from both eicosapentaenoic acid and docosahexaenoic acid. [1] In addition to being anti-inflammatory, resolvins promote the resolution of the inflammatory response. [2] Resolvin D3 (RvD3) is a DHA-derived product first identified in mouse inflammatory exudates. [3] It reduces neutrophil infiltration in vivo in both mouse peritonitis and dermal inflammation. [3] In addition to suppressing leukocyte migration, RvD3 enhances macrophage phagocytosis and efferocytosis [4]. Unlike other resolvins, RvD3 appears late in resolution in mouse peritonitis. [4] [5] Analytical and biological comparisons of synthetic RvD3 with endogenously derived RvD3 have confirmed its identity as matching the natural product. [6]

Reference:

Caution: Product has not been fully validated for medical applications. For research use only.

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- [1]. Hong, S., Gronert, K., Devchand, P.R., et al. Novel docosatrienes and 17S-resolvins generated from docosahexaenoic acid in murine brain, human blood, and glial cells. Autacoids in anti-inflammation. J. Biol. Chem. 278(17), 14677-14687 (2003).
- [2]. Ariel, A., and Serhan, C.N. Resolvins and protectins in the termination program of acute inflammation. TRENDS in Immunology 28(4), 176-183 (2007).
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- [4]. Dalli, J., Winkler, J.W., Colas, R.A., et al. Resolvin D3 and aspirin-triggered resolvin D3 are potent immunoresolvents. Chem. Biol. 20(2), 188-201 (2015).
- [5]. Serhan, C.N. Novel pro-resolving lipid mediators in inflammation are leads for resolution physiology. Nature 510(7503), 92-101 (2014).
- [6]. Serhan, C. . (2007).

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