

Product Name: Resolvin E2
Cat. No.: GC48972

Cas. No. 865532-70-3

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

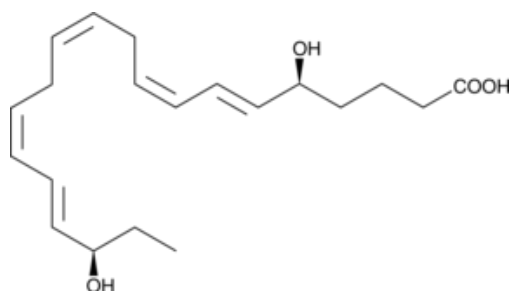
Formula	C20H30O4	M.Wt	334.5
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Solubility	Ethanol: 1 mg/ml	Storage	-80°C
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General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
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Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.
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Structure



Resolvin E2 (RvE2) is a member of the specialized pro-resolving mediator (SPM) family of bioactive lipids.¹ It is produced from eicosapentaenoic acid *via* an 18-HEPE intermediate, which is formed by aspirin-acetylated COX-2-mediated oxidation of EPA, by 5-lipoxygenase (5-LO) in human polymorphonuclear (PMN) neutrophils.^{2,3} RvE2 (20 ng/animal) inhibits increases in inflammatory exudate neutrophil infiltration in a mouse model of peritonitis induced by zymosan A.³ Hepatic RvE2 levels are increased in mice fed normal chow, as well as in a mouse model of high-fat diet-induced non-alcoholic fatty liver disease (NAFLD), by dietary supplementation with EPA.⁴ Plasma levels of RvE2 are increased by dietary supplementation with fish oil containing ω -3 polyunsaturated fatty acids (PUFAs) in patients with peripheral artery disease or chronic kidney disease.^{1,5,6}

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

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Product Data Sheet

1. Chiang, N., and Serhan, C.N. Specialized pro-resolving mediator network: An update on production and actions. *Essays Biochem.* 64(3):443-462(2020)

2. Tjonahen, E., Oh, S.F., Siegelman, J., et al. Resolvin E2: Identification and anti-inflammatory actions: Pivotal role of human 5-lipoxygenase in resolvin E series biosynthesis. *Chemistry & Biology* 13:1193-1202(2006)

3. Sungwhan, F.O., Pillai, P.S., Recchiuti, A., et al. Pro-resolving actions and stereoselective biosynthesis of 18S E-series resolvins in human leukocytes and murine inflammation. *J. Clin. Invest.* 121(2):569-581(2011)

4. Echeverría, F., Valenzuela, R., Espinosa, A., et al. Reduction of high-fat diet-induced liver proinflammatory state by eicosapentaenoic acid plus hydroxytyrosol supplementation: Involvement of resolvins RvE1/2 and RvD1/2. *J. Nutr. Biochem.* 63:35-43(2019)

5. Ramirez, J.L., Gasper, W.J., Khetani, S.A., et al. Fish oil increases specialized pro-resolving lipid mediators in PAD (the OMEGA-PAD II trial). *J. Surg. Res.* 238:164-174(2019)

6. Barden, A.E., Shinde, S., Burke, V., et al. The effect of n-3 fatty acids and coenzyme Q10 supplementation on neutrophil leukotrienes, mediators of inflammation resolution and myeloperoxidase in chronic kidney disease. *Prostaglandins Other Lipid Mediat.* 136:1-8(2018)

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