# PRODUCT INFORMATION



# 19S(20R)-EpDPA

Item No. 28627

CAS Registry No.: 2460392-58-7

Formal Name: 18-[(2S,3R)-3-ethyl-2-oxiranyl]-

4Z,7Z,10Z,13Z,16Z-octadecapentaenoic acid

Synonyms: 19S,20R-EDP, 19S,20R-EpDPE,

19S,20R-epoxy DPA,

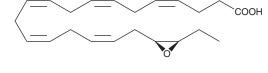
19S,20R-epoxy Docosapentaenoic Acid

MF:  $C_{22}H_{32}O_3$ FW: 344.5 **Purity:** ≥90%

Supplied as: A solution in ethanol

-20°C Storage: Stability: ≥2 years

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



### Description

19S(20R)-EpDPA is an oxylipin and a metabolite of docosahexaenoic acid (DHA; Item No. 90310).<sup>1,2</sup> It is formed from DHA by various cytochrome P450 (CYP) isoforms in a stereoselective manner.<sup>2</sup> Unlike 19R(20S)-EpDPA (Item No. 28628), 19S(20R)-EpDPA does not prevent calcium-induced increases in the spontaneous beating of isolated neonatal rat cardiomyocytes (NRCMs).3

# References

- 1. Cinelli, M.A., Yang, J., Scharmen, A., et al. Enzymatic synthesis and chemical inversion provide both enantiomers of bioactive epoxydocosapentaenoic acids. J. Lipid Res. 59(11), 2237-2252 (2018).
- 2. Lucas, D., Goulitquer, S., Marienhagen, J., et al. Stereoselective epoxidation of the last double bond of polyunsaturated fatty acids by human cytochromes P450. J. Lipid Res. 51(5), 1125-1133 (2010).
- 3. Burke, J.E. and Dennis, E.A. Phospholipase A2 structure/function, mechanism, and signaling. J. Lipid Res. 50(Suppl), S237-S242 (2009).

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

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.

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