

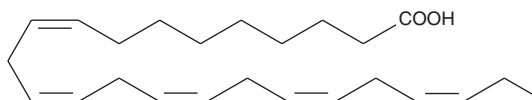
# PRODUCT INFORMATION



## 9(Z),12(Z),15(Z),18(Z),21(Z)-Tetracosapentaenoic Acid

Item No. 10005157

**CAS Registry No.:** 68378-48-3  
**Formal Name:** 9Z,12Z,15Z,18Z,21Z-tetracosapentaenoic acid  
**Synonyms:** all-cis-9,12,15,18,21-Tetracosapentaenoic Acid, FA 24:5  
**MF:** C<sub>24</sub>H<sub>38</sub>O<sub>2</sub>  
**FW:** 358.6  
**Purity:** ≥98%  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥1 year



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

### Laboratory Procedures

9(Z),12(Z),15(Z),18(Z),21(Z)-Tetracosapentaenoic 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.

For maximum solubility in aqueous buffers, the ethanolic solution of 9(Z),12(Z),15(Z),18(Z),21(Z)-tetracosapentaenoic acid should be diluted with the aqueous buffer of choice. 9(Z),12(Z),15(Z),18(Z),21(Z)-Tetracosapentaenoic acid has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

### Description

9(Z),12(Z),15(Z),18(Z),21(Z)-Tetracosapentaenoic acid is an ω-3 very long-chain polyunsaturated fatty acid. It has been used to study the desaturation and elongation of ω-3 polyunsaturated fatty acids.<sup>1</sup> It is elongated to form C26:5 or acted on by Δ6 desaturase to form C24:6. 9(Z),12(Z),15(Z),18(Z),21(Z)-Tetracosapentaenoic acid is found at low levels in mouse brain and spleen and levels decrease in the brain and spleen of old and exceptionally old mice.<sup>2</sup>

### References

- Henderson, R.J., Burkow, I.C., Buzzi, M., *et al.* Effects of docosahexaenoic (22:6n-3), tetracosapentaenoic (24:5n-3) and tetracosahexaenoic (24:6n-3) acids on the desaturation and elongation of n-3 polyunsaturated fatty acids in trout liver microsomes. *Biochim Biophys. Acta.* **1392(2-3)**, 309-319 (1998).
- Arranz, L., Naudí, A., De la Fuente, M., *et al.* Exceptionally old mice are highly resistant to lipoxidation-derived molecular damage. *Age (Dordr)* **35(3)**, 621-635 (2013).

#### 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.

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