

# PRODUCT INFORMATION



## Eicosapentaenoic Acid-d<sub>10</sub>

Item No. 9004864

**Formal Name:** (5Z,8Z,11Z,14Z,17Z)-icosa-5,8,11,14,17-pentaenoic-7,7,10,10,13,13,16,16,19,19-d<sub>10</sub> acid  
**Synonyms:** C20:5(5Z,8Z,11Z,14Z,17Z)-d<sub>10</sub>, C20:5-d<sub>10</sub>, n-3, EPA-d<sub>10</sub>, FA 20:5-d<sub>10</sub>, Timnodonic Acid-d<sub>10</sub>

**MF:** C<sub>20</sub>H<sub>20</sub>D<sub>10</sub>O<sub>2</sub>

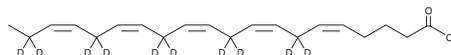
**FW:** 312.5

**Purity:** ≥95%

**Supplied as:** A 5 mg/ml 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.

### Description

Eicosapentaenoic acid-d<sub>10</sub> (EPA-d<sub>10</sub>) is an oxidation-resistant form of EPA that is deuterated at its bis-allylic sites, which are the targets of lipid peroxidation.<sup>1,2</sup> The substitution of deuterium for hydrogen atoms in fatty acids at bis-allylic sites can reduce lipid peroxidation at those sites by decreasing the rate of hydrogen abstraction, an effect known as the kinetic isotope effect.

### References

1. Demidov, V.V. Site-specifically deuterated essential lipids as new drugs against neuronal, retinal and vascular degeneration. *Drug Discov. Today* **25(8)**, 1469-1476 (2020).
2. Shchepinov, M.S. Polyunsaturated fatty acid deuteration against neurodegeneration. *Trends Pharmacol. Sci.* **41(4)**, 236-248 (2020).

#### 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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