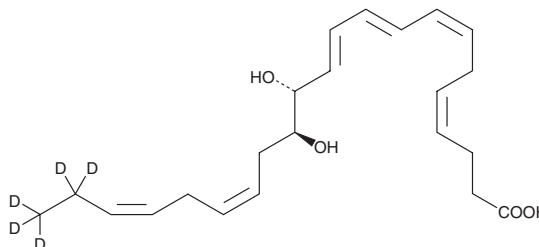


PRODUCT INFORMATION



Maresin 2-d₅ Item No. 20757

Formal Name:	13R,14S-dihydroxy-4Z,7Z,9E,11E,16Z,19Z-docosahexaenoic-21,21,22,22,22-d ₅ acid
Synonyms:	13R,14S-diHDHA-d ₅ , 13R,14S-dihydroxy Docosahexaenoic Acid-d ₅ , MaR2-d ₅
MF:	C ₂₂ H ₂₇ D ₅ O ₄
FW:	365.5
Chemical Purity:	≥95% (Maresin 2)
Deuterium Incorporation:	≥99% deuterated forms (d ₁ -d ₅); ≤1% d ₀
UV/Vis.:	λ _{max} : 274, 285 nm
Supplied as:	A solution in ethanol
Storage:	-80°C
Stability:	As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

Maresin 2-d₅ (MaR2-d₅) contains 5 deuterium atoms at the 21, 21, 22, 22, and 22 positions. It is intended for use as an internal standard for the quantification of MaR2 (Item No. 16369) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

MaR2-d₅ 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. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of MaR2-d₅ in these solvents is approximately 50 mg/ml.

Description

MaR2 is a 13R,14S-dihydroxy DHA formed by recombinant human macrophage 12-lipoxygenase and soluble epoxide hydrolase co-incubated with DHA.¹ At 1 ng/mouse, MaR2 was shown to reduce neutrophil infiltration by 40% in a mouse model of peritonitis, and at 10 pM, MaR2 can enhance human macrophage phagocytosis of zymosan A by 90%.¹

Reference

1. Deng, B., Wang, C.W., Arnardottir, H.H., *et al.* Maresin biosynthesis and identification of maresin 2, a new anti-inflammatory and pro-resolving mediator from human macrophages. *PLoS One* **9**(7), e102362 (2014).

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.

WARRANTY AND LIMITATION OF REMEDY
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