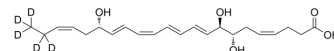


Resolvin D1-d₅

Cat. No.:	HY-125527S
CAS No.:	1881277-32-2
Molecular Formula:	C ₂₂ H ₂₇ D ₅ O ₅
Molecular Weight:	381.52
Target:	Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Resolvin D1-d ₅ is the deuterium labeled Resolvin D1. Resolvin D1 (RvD1), an endogenous pro-resolving mediator of inflammation, is derived from omega-3 docosahexaenoic acid during the resolution phase of acute inflammation. Resolvin D1 blocks proinflammatory neutrophil migration by regulating actin polymerization, reduces TNF- α -mediated inflammation in macrophages, and enhances phagocytosis of apoptotic cells by macrophages[1][2].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [2]. Schmid M, et al. Resolvin D1 Polarizes Primary Human Macrophages toward a Proresolution Phenotype through GPR32. *J Immunol.* 2016 Apr 15;196(8):3429-37.
- [3]. Gao Y, et al. Resolvin D1 Improves the Resolution of Inflammation via Activating NF- κ B p50/p50-Mediated Cyclooxygenase-2 Expression in Acute Respiratory Distress Syndrome. *J Immunol.* 2017 Aug 9. pii: j1700315.
- [4]. Benabdoun HA, et al. In vitro and in vivo assessment of the proresolutive and antiresorptive actions of resolvin D1: relevance to arthritis. *Arthritis Res Ther.* 2019 Mar 12;21(1):72.

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

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