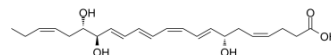


Resolvin D2

Cat. No.:	HY-121636
CAS No.:	810668-37-2
Molecular Formula:	C ₂₂ H ₃₂ O ₅
Molecular Weight:	376.49
Target:	TRP Channel
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Solution, -20°C, 2 years



BIOLOGICAL ACTIVITY

Description	Resolvin D2 is a metabolite of docosahexaenoic acid (DHA), with anti-inflammatory, anti-infective activities. Resolvin D2 is a potent regulator of leukocytes and controls microbial sepsis. Resolvin D2 is a remarkably potent inhibitor of TRPV1 (IC ₅₀ = 0.1 nM) and TRPA1 (IC ₅₀ = 2 nM) in primary sensory neurons ^{[1][2][3]} .								
IC₅₀ & Target	TRP Channel ^[3]								
In Vivo	<p>Resolvin D2 induces active resolution of inflammation with pulp-like tissue regeneration after root canal infection and thus maybe suitable for treating periapical lesions^[1].</p> <p>Resolvin D2 decreases leukocyte:endothelial interactions in vivo by endothelial-dependent nitric oxide production, and direct modulation of leukocyte adhesion receptor expression^[2].</p> <p>Peripheral administration of Resolvin D2 (10 ng; Intraplantar administration) potently inhibits inflammatory pain^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adult CD1 mice (male, 8–10 weeks)^[3]</td> </tr> <tr> <td>Dosage:</td> <td>10 ng</td> </tr> <tr> <td>Administration:</td> <td>Intraplantar administration</td> </tr> <tr> <td>Result:</td> <td>Inhibited inflammatory pain.</td> </tr> </table>	Animal Model:	Adult CD1 mice (male, 8–10 weeks) ^[3]	Dosage:	10 ng	Administration:	Intraplantar administration	Result:	Inhibited inflammatory pain.
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Dosage:	10 ng								
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REFERENCES

- [1]. Siddiqui YD, et al. Resolvin D2 Induces Resolution of Periapical Inflammation and Promotes Healing of Periapical Lesions in Rat Periapical Periodontitis. *Front Immunol.* 2019 Feb 26;10:307.
- [2]. Spite M, et al. Resolvin D2 is a potent regulator of leukocytes and controls microbial sepsis. *Nature.* 2009 Oct 29;461(7268):1287-91.
- [3]. Park CK, et al. Resolvin D2 is a potent endogenous inhibitor for transient receptor potential subtype V1/A1, inflammatory pain, and spinal cord synaptic plasticity in mice: distinct roles of resolvin D1, D2, and E1.6. *J Neurosci.* 2011 Dec 14;31(50):18433-8.

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

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