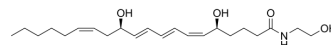


Leukotriene B4 ethanolamide

Cat. No.:	HY-131651
CAS No.:	877459-63-7
Molecular Formula:	C ₂₂ H ₃₇ NO ₄
Molecular Weight:	379.53
Target:	Endogenous Metabolite; Leukotriene Receptor
Pathway:	Metabolic Enzyme/Protease; GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Leukotriene B4 ethanolamide (LTB4 ethanolamide) is an antagonist and a partial agonist for Leukotriene B4 (LTB4) receptor 1 (BLTR1). Leukotriene B4 ethanolamide ameliorates the tumor progression, which is only associated with inflammation ^[1] ^[2] .								
IC₅₀ & Target	Human Endogenous Metabolite								
In Vitro	<p>Leukotriene B4 ethanolamide suppresses the contractile action of LTB 4 in guinea-pig isolated lung parenchyma with K_b of 7.28 nM^[1].</p> <p>Leukotriene B4 ethanolamide (1 μM) acts as a partial agonist for BLT receptor in cell PMN, induces PMN migration with pEC₅₀ of 7^[2].</p> <p>Leukotriene B4 ethanolamide (1 μM) stimulates Ca²⁺ release in rat TRPV1-expressing CHO cells with pEC₅₀ of 7.28^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Migration Assay ^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>PMN</td> </tr> <tr> <td>Concentration:</td> <td>1 μM</td> </tr> <tr> <td>Incubation Time:</td> <td></td> </tr> <tr> <td>Result:</td> <td>Induced migration of neutrophils.</td> </tr> </table>	Cell Line:	PMN	Concentration:	1 μM	Incubation Time:		Result:	Induced migration of neutrophils.
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In Vivo	<p>Leukotriene B4 ethanolamide (100 nM/mouse/day for 5 days, s.c.) inhibits the tumor progression associated by inflammation in C57BL/6 mice^[2].</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>Melanoma tumor in C57BL/6 mouse models^[2]</td> </tr> <tr> <td>Dosage:</td> <td>100 nM/mouse</td> </tr> <tr> <td>Administration:</td> <td>s.c., once a day for 5 days</td> </tr> <tr> <td>Result:</td> <td>Inhibited melanoma tumor growth in mice coinjected with apoptotic Tm1 melanoma cells</td> </tr> </table>	Animal Model:	Melanoma tumor in C57BL/6 mouse models ^[2]	Dosage:	100 nM/mouse	Administration:	s.c., once a day for 5 days	Result:	Inhibited melanoma tumor growth in mice coinjected with apoptotic Tm1 melanoma cells
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and a subtumorigenic dose of Tm1.

REFERENCES

- [1]. McHugh D, et al., Novel compounds that interact with both leukotriene B4 receptors and vanilloid TRPV1 receptors. J Pharmacol Exp Ther. 2006 Feb;316(2):955-65.
- [2]. Bachi AL, et al., Leukotriene B4 creates a favorable microenvironment for murine melanoma growth. Mol Cancer Res. 2009 Sep;7(9):1417-24.
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Caution: Product has not been fully validated for medical applications. For research use only.

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