

Product Information



BLT₁ Receptor Polyclonal Antiserum

Item No. 100019

Synonyms:	BLTR ₁ , Leukotriene B ₄ Receptor 1, LTB ₄ Receptor 1
Contents:	This vial contains polyclonal antiserum lyophilized from 100 µl. This is sufficient for ten (10 x 10 cm) immunoblots.
Host:	Rabbit
Stability:	≥2 years at -20°C
Antigen:	Human BLT ₁ receptor amino acids 331-352 (ALEPGPSESLTASSPLKLNELN). Homology of peptide antigen with BLT ₁ receptor from other species: ¹ Human A L E P G P S E S L T A S S P L K L N E L N Mouse c p E P G P t d S f m t S S t i p e s - s k Guinea pig A p E P G a S g S L d g - - - L K q s E s d
Cross Reactivity:	(+) Human and bovine BLT ₁ receptor; (-) mouse BLT ₁ receptor
Applications:	Western blotting: 1:1,000 dilution (80 and 60 kDa band pattern). IHC (formalin-fixed paraffin sections) recommended dilution: 1:200. ² Flow cytometry and confocal microscopy analysis of the receptor: approximately 1:2,000 dilution of the antiserum. BLT ₁ receptor blocking peptide (Item No. 120112) is available for negative control experiments.

The leukotriene B₄ receptor 1 (BLT₁ receptor), cloned from HL-60 human leukemia cells, has 352 amino acids and seven putative membrane-spanning domains.³ The primary structure of the receptor is identical to that of a putative purinoceptor, P2Y7, which binds to micromolar concentrations of ATP.⁴ Northern blotting reveals that the BLT₁ receptor is highly expressed in leukocytes, U937 cells, and to a much lower extent in spleen and thymus.³ Sheep lung membranes have also been identified as a rich source for receptor isolation and purification.⁵ A second LTB₄ receptor, BLT₂, has recently been cloned and characterized.⁶⁻⁸

Cayman's BLT₁ receptor polyclonal antiserum is made against a peptide from the C-terminus of the BLT₁ receptor, which is located on the intracellular side of the plasma membrane. Therefore, when performing studies on whole cells, permeabilization of the cells is required for the antibody to enter the cytosol.

References

- Boie, Y., Stocco, R., Sawyer, N., *et al.* Characterization of the cloned guinea pig leukotriene B₄ receptor: comparison to its human orthologue. *Eur. J. Pharmacol.* **380**, 203-213 (1999).
- Hennig, R., Ding, X.-Z., Tong, W.-G., *et al.* 5-Lipoxygenase and leukotriene B₄ receptor are expressed in human pancreatic cancers but not in pancreatic ducts in normal tissue. *Amer. J. Pathol.* **161**(2), 421-428 (2002).
- Yokomizo, T., Izumi, T., Chang, K., *et al.* A G-protein-coupled receptor for leukotriene B₄ that mediates chemotaxis. *Nature* **387**, 620-624 (1997).
- Akbar, G.K.M., Dasari, V.R., Webb, T.E., *et al.* Molecular cloning of a novel P₂ purinoceptor from human erythroleukemia cells. *J. Biol. Chem.* **271**, 18363-18367 (1996).
- Votta, B., Keefer, J., and Mong, S. Characterization of the soluble leukotriene B₄ receptor from sheep lung membranes. *Biochem. J.* **270**, 213-218 (1990).
- Yokomizo, T., Kato, K., Terawaki, K., *et al.* A second leukotriene B₄ receptor, BLT₂: A new therapeutic target in inflammation and immunological disorders. *J. Exp. Med.* **193**, 421-431 (2000).
- Kamohara, M., Takasaki, J., Matsumoto, M., *et al.* Molecular cloning and characterization of another leukotriene B₄ receptor. *J. Biol. Chem.* **275**, 27000-27004 (2000).
- Wang, S., Gustafson, E., Pang, L., *et al.* A novel hepatointestinal leukotriene B₄ receptor. *J. Biol. Chem.* **275**, 40686-40694 (2000).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/100019

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 12/20/2011

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com