Product Information

BLT_1 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 sufficent 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 B_4 receptor 1 (BLT_1 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 BLT_1 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 LTB_4 receptor, BLT_2, has recently been cloned and characterized.[6-8]

Cayman's BLT_1 receptor polyclonal antiserum is made against a peptide from the C-terminus of the BLT_1 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

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8. Wang, S., Gustafson, E., Pang, L., *et al.* A novel hepatointestinal leukotriene B_4 receptor. *J. Biol. Chem.* **275**, 40686-40694 (2000).

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