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Product datasheet for TA328655

Leukotriene B4 Receptor (LTB4R) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CFPRYPSEGHRAFH, corresponding to amino acid residues 168-181 of human BLT1. 2nd extracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	leukotriene B4 receptor
Database Link:	NP_858043 Entrez Gene 1241 Human Q15722

View online »

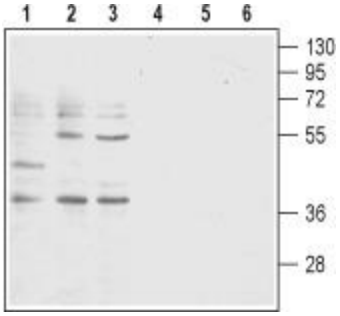
Background: Leukotrienes (LTs) are lipid mediators prominently exerting proinflammatory responses. They are divided in two classes: cysteinyl LTs (cysLTs) which have a thioester linkage and LTB4. LTB4, a chemoattractant plays a prominent role in the recruitment and activation of leukocytes. LTB4 acts through two receptors which belong to the G-protein coupled receptor superfamily: BLT1 and BLT2. BLT1 displays high affinity for LTB4 and is highly expressed in leukocytes including granulocytes, macrophages, mast cells, dendritic cells and effector T cells and is expressed to much lower levels in spleen, thymus, heart, skeletal muscle brain and liver. BLT2 on the other hand is a low affinity receptor which does not display selectivity towards LTB4. Its expression is much more ubiquitous than that of BLT1. It is expressed in most human tissues, with the highest expression being in spleen, liver, ovary, and leukocytes. The two receptors could couple and activate different G-proteins, depending on the cell type and the cellular events activating the receptors. However, activation of BLT1 ususally correlates with increasing intracellular concentrations of Ca2+. The LTB4/BLT1 system is involved in many allergic reactions as well as asthma induced as an allergic response, where it plays a significant role in recruiting neutrophils and effector T cells into lungs, as part of an inflammatory response induced by allergens.

Synonyms: BLT1; BLTR; CMKRL1; GPR16; LTB4R1; LTBR1; P2RY7; P2Y7

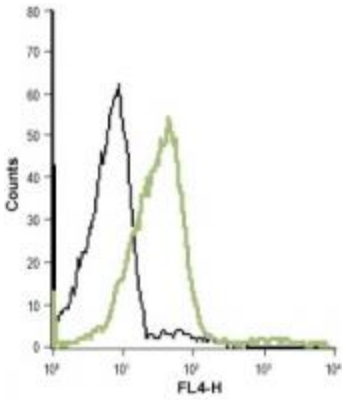
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

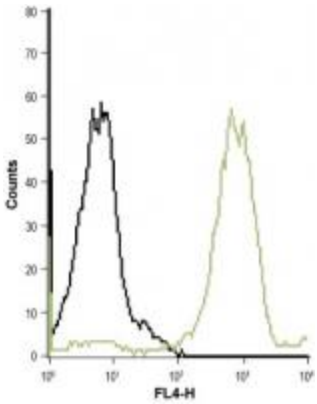
Product images:



Western blot analysis of acute T-cell leukemia Jurkat (lanes 1 and 4), promyelocytic leukemia HL-60 (lanes 2 and 5) and acute monocytic leukemia THP-1 (lanes 3 and 6) human cell lysates: 1-3. Anti-Human BLT1 (extracellular) antibody, (1:200). 4-6. Anti-Human BLT1 (extracellular) antibody, preincubated with the control peptide antigen.



Indirect flow cytometry analysis in live intact human T cell leukemia (Jurkat) cell line: black line: Control cells + goat-anti-rabbit-Cy5. Green line: Cells + Anti-Human BLT1 (extracellular) antibody, (1:25) + goat-anti-rabbit-Cy5.



Indirect flow cytometry analysis in live intact human acute monocytic leukemia (THP-1) cell line: black line: Control cells + goat-anti-rabbit-Cy5. Green line: Cells + Anti-Human BLT1 (extracellular) antibody, (1:25) + goat-anti-rabbit-Cy5.