

Product datasheet for **TA328673**

CysLT1 (CYSLTR1) 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 (C)HNETKP(S)DSVLRMQK, corresponding to amino acid residues 261-275 of human CysLTR1. 3rd 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% NaN ₃ .
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:	cysteinyl leukotriene receptor 1
Database Link:	NP_006630 Entrez Gene 10800 Human Q9Y271



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Background:

LTC4, LTD4, and LTE4 are leukotrienes (cys-LTs) derived from arachidonic acid as a result of immune or inflammatory stimuli. The above mentioned cys-LTs bind and activate two receptors belonging to the G-protein coupled receptor superfamily, CysLTR1 and CysLTR2 (also named cysLT1 and cysLT2 respectively). There is evidence though that other receptors are yet to be identified. These two receptors couple to both pertussis toxin sensitive (Gi/o) and insensitive (Gq, which initiates Ca²⁺ influx) G-proteins for their signaling. The G-protein coupled to is probably determined by which ligand binds the receptor as all three cys-LTs can activate the two receptors albeit with different affinities. In mouse, CysLTR1 and CysLTR2 are subject to alternative splicing. CysLTR1 receptor expresses greater affinity for LTD4 and binds equally to LTC4 and LTE4 whereas CysLTR2 has greater and equal affinity towards LTC4 and LTD4 over LTE4. Human CysLTR1 is highly expressed in spleen, peripheral blood, leukocytes. It is less strongly expressed in lung, small intestine, pancreas and hardly or not expressed in liver, colon, kidney, skeletal muscle, testis heart and brain. On the other hand, CysLTR2 is highly expressed in spleen and leukocytes. Its expression in the heart, brain, spinal cord and adrenal gland differs it from that of CysLTR1. Cys-LTs and their receptors are involved in respiratory diseases like asthma and other conditions such as cancer cardiovascular, gastrointestinal, skin and immune disorders.

Synonyms:

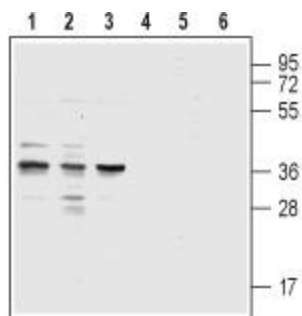
CYSLT1; CYSLT1R; CYSLTR; HMTMF81

Protein Families:

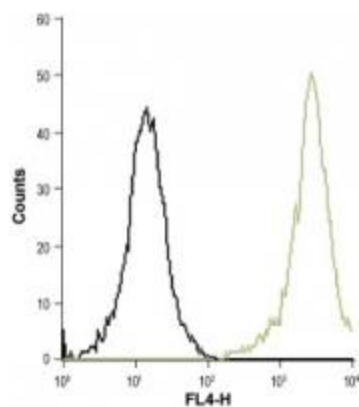
Druggable Genome, GPCR, Transmembrane

Protein Pathways:

Calcium signaling pathway, Neuroactive ligand-receptor interaction

Product images:

Western blot analysis of acute monocytic leukemia THP-1 (lanes 1 and 4), promyelocytic leukemia HL-60 (lanes 2 and 5) and acute T-cell leukemia Jurkat (lanes 3 and 6) human cell lysates: 1, 3. Anti-CysLTR1 (extracellular) antibody, (1:200). 4, 6. Anti-CysLTR1 (extracellular) antibody, preincubated with the control peptide antigen.



Indirect flow cytometry analysis in live intact THP-1 (acute monocytic leukemia) cells: black line: Cells + goat-anti-rabbit-Cy5. green line: Cells + Anti-CysLTR1 (extracellular) antibody, (1:50) + goat-anti-rabbit-Cy5.