PRODUCT INFORMATION

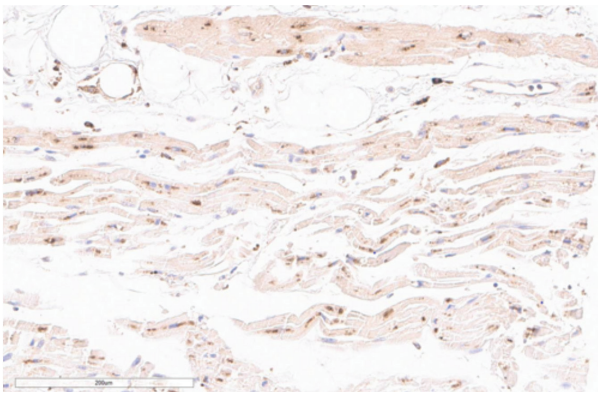
$CysLT_2$ Receptor (N-Term) Polyclonal Antibody

Item No. 120560

Overview and Properties

Contents:	This vial contains peptide affinity-purified polyclonal antibody.
Synonym:	Cysteinyl-Leukotriene Receptor 2 (N-Term)
Immunogen:	Peptide corresponding to the N-terminal region of human $CysLT_2$
Cross Reactivity:	(+) $CysLT_2$; (-) $CysLT_1$
Species Reactivity:	(+) Human; (-) Rat
Uniprot No.:	Q9NS75
Form:	Lyophilized
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, when reconstituted in 500 µl deionized water
Host:	Rabbit
Applications:	ELISA, flow cytometry (FC), and Western blot (WB); the recommended starting dilution for ELISA is 1:200, ~1:1,000 for FC, and 1:250 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human heart tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with CysLT2 Receptor (N-Term) Polyclonal Antibody (Item No. 120560) at a 1:120 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

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Description

Cysteinyl leukotriene receptor 2 ($CysLT_2$) is a G protein-coupled receptor that mediates the actions of leukotriene C_4 (LTC_4), LTD_4, and, to a lesser extent, LTE_4.[1] It is expressed primarily in the heart, placenta, spleen, lymph nodes, and peripheral blood leukocytes.[1,2] Signaling induced by LTC_4 through the $CysLT_2$ receptor induces the production of chemokines *via* NF-κB and AP-1 activation in endothelial cells, indicating a role in inflammation.[3] A $CysLT_2$ receptor containing a leucine-to-glutamine substitution at position 129 (L129Q) has been found in human uveal melanoma cells and is associated with tumorigenesis *in vivo*.[4,5] SNPs in *CYSLTR2* are associated with aspirin intolerance in patients with asthma.[6] Cayman's $CysLT_2$ Receptor (N-Term) Polyclonal Antibody can be used for ELISA, flow cytometry (FC), and Western blot (WB) applications.

References

1. Heise, C.E., O'Dowd, B.F., Figueroa, D.J., *et al.* Characterization of the human cysteinyl leukotriene 2 receptor. *J. Biol. Chem.* **275**, 30531-30536 (2000).
2. Takasaki, J., Kamohara, M., Matsumoto, M., *et al.* The molecular characterization and tissue distribution of the human cysteinyl leukotriene $CysLT_2$ receptor. *Biochem. Biophys. Res. Commun.* **274**, 316-322 (2000).
3. Thompson, C., Cloutier, A., Bossé, Y., *et al.* Signaling by the cysteinyl-leukotriene receptor 2. Involvement in chemokine gene transcription. *J. Biol. Chem.* **283(4)**, 1974-1984 (2008).
4. Moore, A.R., Ceraudo, E., Sher, J.J., *et al.* Recurrent activating mutations of G-protein-coupled receptor CYSLTR2 in uveal melanoma. *Nat. Genet.* **48(6)**, 675-680 (2016).
5. Ceraudo, E., Horioka, M., Mattheisen, J.M., *et al.* Direct evidence that the GPCR CysLTR2 mutant causative of uveal melanoma is constitutively active with highly biased signaling. *J. Biol. Chem.* **296**, 100163 (2021).
6. Park, J.S., Chang, H.S., Park, C.-S., *et al.* Association analysis of cysteinyl-leukotriene receptor 2 (CYSLTR2) polymorphisms with aspirin intolerance in asthmatics. *Pharmacogenet. Genomics* **15(7)**, 483-492 (2005).

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