

# PRODUCT INFORMATION



## CysLT<sub>2</sub> Receptor (C-Term) Polyclonal Antibody Item No. 120550

### Overview and Properties

<b>Contents:</b>	This vial contains peptide affinity-purified polyclonal antibody.
<b>Synonym:</b>	Cysteinyl-Leukotriene Receptor 2
<b>Immunogen:</b>	Synthetic peptide from the C-terminal region of human CysLT <sub>2</sub> Receptor.
<b>Cross Reactivity:</b>	(+) CysLT <sub>1</sub>
<b>Species Reactivity:</b>	(+) Human, (-) Rat; other species not tested
<b>Uniprot No.:</b>	Q9NS75
<b>Form:</b>	Lyophilized
<b>Storage:</b>	20°C (as supplied)
<b>Stability:</b>	≥2 years
<b>Storage Buffer:</b>	TBS, pH 7.4, when reconstituted in 500 µl deionized water
<b>Host:</b>	Rabbit
<b>Applications:</b>	ELISA, Flow Cytometry (FC), Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution or ELISA, FC, and WB is 1:200 and 1:40 for IHC. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Description

The cysteinyl leukotrienes (cysLTs; LTC<sub>4</sub>, LTD<sub>4</sub>, and LTE<sub>4</sub>) contract airway and pulmonary vascular smooth muscle, increase vascular permeability, and stimulate mucus secretion, thereby playing a major role in asthma.<sup>3-6</sup> LTC<sub>4</sub>, LTD<sub>4</sub>, and LTE<sub>4</sub> mediate their actions *via* at least two receptors designated CysLT<sub>1</sub> and CysLT<sub>2</sub>.<sup>3</sup> Cloning of the human CysLT<sub>2</sub> receptor reveals it is a 346 amino acid protein with 38% homology to the CysLT<sub>1</sub> receptor.<sup>1,7</sup> The rank order of binding for leukotrienes to the cloned receptor, as determined using a radioligand binding assay, is LTC<sub>4</sub> = LTD<sub>4</sub> >> LTE<sub>4</sub>.<sup>1</sup> The mRNA for the human CysLT<sub>2</sub> receptor is expressed in lung macrophages, airway smooth muscle, cardiac Purkinje cells, adrenal medulla cells, peripheral blood leukocytes, spleen, placenta, and brain.<sup>1,2</sup>

### 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<sub>2</sub> receptor. *Biochem. Biophys. Res. Commun.* **274**, 316-322 (2000).
3. Gorenne, I., Norel, X., and Brink, C. Cysteinyl leukotriene receptors in the human lung: What's new? *Trends Pharmacol. Sci.* **17**, 342-343 (1996).
4. Dahlén, S.-E., Hansson, G., Hedqvist, P., *et al.* Allergen challenge of lung tissue from asthmatics elicits bronchial contraction that correlates with the release of leukotrienes C<sub>4</sub>, D<sub>4</sub>, and E<sub>4</sub>. *Proc. Natl. Acad. Sci. USA* **80**, 1712-1716 (1983).
5. Busse, W.W. The role of leukotrienes in asthma and allergic rhinitis. *Clin. Exp. Allergy* **26**, 868-879 (1996).
6. Hedqvist, P., Dahlén, S.-E., Gustafsson, L., *et al.* Biological profile of leukotrienes C<sub>4</sub> and D<sub>4</sub>. *Acta Physiol. Scand.* **110**, 331-333 (1980).
7. Lynch, K.R., O'Neill, G.P., Liu, Q., *et al.* Characterization of the human cysteinyl leukotriene CysLT<sub>1</sub> receptor. *Nature* **399**, 789-793 (1999).

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY  
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