

PRODUCT INFORMATION



CysLT₂ Receptor (C-Term) Polyclonal Antibody Item No. 120550

Overview and Properties

Contents:	This vial contains peptide affinity-purified polyclonal antibody.
Synonym:	Cysteinyl-Leukotriene Receptor 2
Immunogen:	Synthetic peptide from the C-terminal region of human CysLT ₂ Receptor.
Cross Reactivity:	(+) CysLT ₁
Species Reactivity:	(+) Human, (-) Rat; other species not tested
Uniprot No.:	Q9NS75
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	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; LTC₄, LTD₄, and LTE₄) contract airway and pulmonary vascular smooth muscle, increase vascular permeability, and stimulate mucus secretion, thereby playing a major role in asthma.³⁻⁶ LTC₄, LTD₄, and LTE₄ mediate their actions *via* at least two receptors designated CysLT₁ and CysLT₂.³ Cloning of the human CysLT₂ receptor reveals it is a 346 amino acid protein with 38% homology to the CysLT₁ receptor.^{1,7} The rank order of binding for leukotrienes to the cloned receptor, as determined using a radioligand binding assay, is LTC₄ = LTD₄ >> LTE₄.¹ The mRNA for the human CysLT₂ receptor is expressed in lung macrophages, airway smooth muscle, cardiac Purkinje cells, adrenal medulla cells, peripheral blood leukocytes, spleen, placenta, and brain.^{1,2}

References

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2. Takasaki, J., Kamohara, M., Matsumoto, M., *et al.* The molecular characterization and tissue distribution of the human cysteinyl leukotriene CysLT₂ 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 C₄, D₄, and E₄. *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 C₄ and D₄. *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 CysLT₁ 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.

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM