

Product Information



CysLT₂ Receptor (N-Term) Polyclonal Antibody

Item No. 120560 • Lot No. XXXXXX

Synonym:	Cysteinyl-Leukotriene Receptor 2 (N-Term)
Contents:	This vial contains (100-500 µg of peptide affinity-purified IgG, lot specific) in 500 µl TBS, pH lot specific , containing 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Antigen:	The CysLT ₂ receptor polyclonal antibody was raised against a synthetic peptide from the human CysLT ₂ receptor (N-terminal amino acids 1-18; MERKFMSLQPSISVSEME) conjugated to KLH. ^{1,2}
Cross Reactivity:	(+) Human CysLT ₂ receptor; (-) CysLT ₁ receptor, mouse and rat CysLT ₂ receptors.
Stability:	≥1 year at -20°C
Applications:	This polyclonal antibody can be used for detection of the CysLT ₂ receptor (N-Term) by western blot, immunocytochemistry, immunohistochemistry, and flow cytometry. Western blot: Dilute 1:250 (2 µg/ml) Flow cytometry: Dilute ~1:1,000. The best working dilution of the antibody will need to be determined empirically.
Concentration:	Varies by lot, from 0.2-1.0 mg/ml (100-500 µg/vial). Always 100 µl final working volume for western blotting.

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 2 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 human 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

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 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).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/120560

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 12/20/2011

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com