

# CysLT<sub>2</sub> Receptor (E-20): sc-27097

## BACKGROUND

Cysteinyl leukotriene (CysLTs) induce intracellular calcium mobilization through the binding of two distinct seven-transmembrane, G protein-coupled receptors, designated CysLT<sub>1</sub> and CysLT<sub>2</sub> Receptors, to induce potent bronchoconstriction. Airway smooth muscle and macrophages express both receptor types, and additionally monocytes and eosinophils express CysLT<sub>1</sub> Receptor, while cardiac Purkinje cells, adrenal medulla, peripheral blood leukocytes and brain also utilize CysLT<sub>2</sub> Receptor. The effects of the CysLT receptors can be blocked by antagonists, indicating a therapeutic mechanism for the treatment of asthma and allergies.

## CHROMOSOMAL LOCATION

Genetic locus: CYSLTR2 (human) mapping to 13q14.2; Cysltr2 (mouse) mapping to 14 D3.

## SOURCE

CysLT<sub>2</sub> Receptor (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CysLT<sub>2</sub> Receptor of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27097 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

CysLT<sub>2</sub> Receptor (E-20) is recommended for detection of CysLT<sub>2</sub> Receptor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CysLT<sub>2</sub> Receptor siRNA (h): sc-43713, CysLT<sub>2</sub> Receptor siRNA (m): sc-142751, CysLT<sub>2</sub> Receptor shRNA Plasmid (h): sc-43713-SH, CysLT<sub>2</sub> Receptor shRNA Plasmid (m): sc-142751-SH, CysLT<sub>2</sub> Receptor shRNA (h) Lentiviral Particles: sc-43713-V and CysLT<sub>2</sub> Receptor shRNA (m) Lentiviral Particles: sc-142751-V.

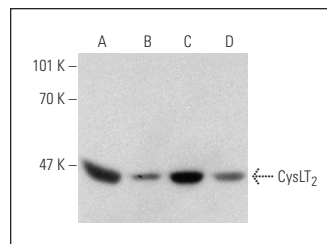
Molecular Weight of CysLT<sub>2</sub> Receptor: 43 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A-10 cell lysate: sc-3806 or PC-12 cell lysate: sc-2250.

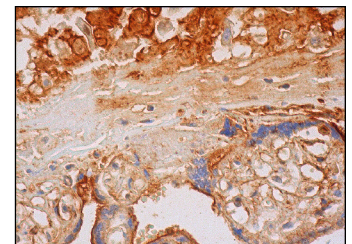
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



CysLT<sub>2</sub> Receptor (E-20): sc-27097. Western blot analysis of CysLT<sub>2</sub> Receptor expression in A-10 (A), PC-12 (B), SW-13 (C) and Jurkat (D) whole cell lysates.



CysLT<sub>2</sub> Receptor (E-20): sc-27097. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic and membrane staining of trophoblastic cells and decidual cells.

## SELECT PRODUCT CITATIONS

- Vannella, K.M., et al. 2007. Cysteinyl leukotrienes are autocrine and paracrine regulators of fibrocyte function. *J. Immunol.* 179: 7883-7890.
- Dartt, D.A., et al. 2011. Conjunctival goblet cell secretion stimulated by leukotrienes is reduced by resolvins D1 and E1 to promote resolution of inflammation. *J. Immunol.* 186: 4455-4466.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CysLT<sub>2</sub> Receptor (B-7): sc-514181**, our highly recommended monoclonal alternative to CysLT<sub>2</sub> Receptor (E-20).