SANTA CRUZ BIOTECHNOLOGY, INC.

# LTB4R2 (B-12): sc-518262

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The P2Y receptor family consists of G protein-coupled receptors, which mediate the effects of extracellular nucleotides, primarily through the activation of phospholipase C. The P2Y receptors are important in the activation of leukocytes and platelets in response to inflammation or vascular damage. Leukotriene B4 receptor 1 (LTB4R1), also designated P2Y purinoceptor 7, is a receptor for extracellular ATP, UTP and ADP. Through modulation of L-type calcium currents, LTB4R1 is involved in the regulation of cardiac muscle contraction. It is also a receptor for Leukotriene B4 (LTB4), a potent chemoattractant involved in inflammation and immumne response. Leukotriene B4 receptor 2 (LTB4R2) is an ubiquitously expressed 358 amino acid receptor for LTB4. It is an integral membrane protein acting as a receptor for leukotrienes, is widely expressed and mediates chemotaxis of macrophages and granulocytes.

## REFERENCES


1. Kamohara, M., et al. 2000. Molecular cloning and characterization of another Leukotriene B4 receptor. J. Biol. Chem. 275: 27000-27004.
2. Wang, S., et al. 2000. A novel hepatointestinal Leukotriene B4 receptor. Cloning and functional characterization. J. Biol. Chem. 275: 40686-40694.
3. Tryselius, Y., et al. 2000. Cloning and characterization of cDNA encoding a novel human Leukotriene B4 receptor. Biochem. Biophys. Res. Commun. 274: 377-382.
4. Nilsson, N.E., et al. 2000. Genomic organization of the Leukotriene B4 receptor locus of human chromosome 14. Biochem. Biophys. Res. Commun. 274: 383-388.
5. Kato, K., et al. 2000. Cell-specific transcriptional regulation of human Leukotriene B4 receptor gene. J. Exp. Med. 192: 413-420.
6. Yokomizo, T., et al. 2000. A second Leukotriene B4 receptor, BLT2. A new therapeutic target in inflammation and immunological disorders. J. Exp. Med. 192: 421-432.


## CHROMOSOMAL LOCATION

Genetic locus: LTB4R2 (human) mapping to 14q12.

## SOURCE

LTB4R2 (B-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 341-369 of LTB4R2 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LTB4R2 (B-12) is available conjugated to agarose (sc-518262 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-518262 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518262 PE), fluorescein (sc-518262 FITC), Alexa Fluor® 488 (sc-518262 AF488), Alexa Fluor® 546 (sc-518262 AF546), Alexa Fluor® 594 (sc-518262 AF594) or Alexa Fluor® 647 (sc-518262 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518262 AF680) or Alexa Fluor® 790 (sc-518262 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

LTB4R2 (B-12) is recommended for detection of LTB4R2 of human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LTB4R2 siRNA (h2): sc-270417, LTB4R2 shRNA Plasmid (h2): sc-270417-SH and LTB4R2 shRNA (h2) Lentiviral Particles: sc-270417-V.

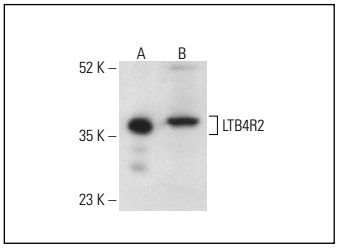
Molecular Weight of LTB4R2: 42 kDa.

Positive Controls: human brain extract: sc-364375.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA




LTB4R2 (B-12): sc-518262. Western blot analysis of LTB4R2 expression in human recombinant LTB4R2 fusion protein (**A**) and human brain tissue extract (**B**). Detection reagent used: m-$IgG_1$ BP-HRP: sc-525408.

## 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.

## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.