SANTA CRUZ BIOTECHNOLOGY, INC.

LTB4DH (S-12): sc-137587

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Leukotriene B4 is a dihydroxy fatty acid derived from arachidonic acid that is produced by leukocytes in response to inflammatory mediators. It induces adhesion and activation of leukocytes on the endothelium, thereby allowing them to bind and invade the tissue. LTB4DH (leukotriene B4 12-hydroxydehydrogenase), also known as Prostaglandin reductase 1 and 15-oxoprostaglandin 13-reductase, is a 329 amino acid cytoplasmic protein that catalyzes the conversion of leukotriene B4 into 12-oxo-leukotriene B4, a less active metabolite. This is the initial step of leukotriene B4 inactivation. LTB4DH is highly expressed in kidney, intestine and liver, but is not present in leukocytes. The gene encoding LTB4DH is upregulated in response to high levels of ibuprofen.

REFERENCES

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4. Schultz, I.J., et al. 2006. Prediction of recurrence in Ta urothelial cell carcinoma by real-time quantitative PCR analysis: a microarray validation study. Int. J. Cancer 119: 1915-1919.
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8. De Lisle, R.C., et al. 2008. Altered eicosanoid metabolism in the cystic fibrosis mouse small intestine. J. Pediatr. Gastroenterol. Nutr. 47: 406-416.
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CHROMOSOMAL LOCATION

Genetic locus: PTGR1 (human) mapping to 9q31.3.

SOURCE

LTB4DH (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LTB4DH of human origin.

STORAGE

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

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-137587 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LTB4DH (S-12) is recommended for detection of LTB4DH of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 LTB4DH siRNA (h): sc-92772, LTB4DH shRNA Plasmid (h): sc-92772-SH and LTB4DH shRNA (h) Lentiviral Particles: sc-92772-V.

Molecular Weight of LTB4DH: 36 kDa.

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) 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.

RESEARCH USE

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

PROTOCOLS

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