



LT- β (G-19): sc-23561

BACKGROUND

Tumor necrosis factor (TNF) and lymphotoxin- α (LT- α , also known as TNF β) are members of a family of secreted and cell surface cytokines that participate in the regulation of immune and inflammatory responses. LT- β (lymphotoxin- β or TNFC) is a type II membrane protein with significant homology to TNF, LT- α and the ligand for the CD40 receptor. LT- α is present on the surface of activated T, B and LAK cells as a complex with LT- β . LT- β , also expressed by active lymphocytes, forms a heterotrimer with LT- α on the cell surface and anchors LT- α to the cell surface. A TNF receptor-related protein, the LT- β receptor (also known as TNFC receptor), is the human receptor for the LT- α /LT- β heterotrimer. There are two LT- β isoforms expressed in human lymphoid cell lines and non-Hodgkin's lymphomas. The gene which encodes LT- β maps to the major histocompatibility complex region on human chromosome 6p21.3.

REFERENCES

1. Browning, J.L., et al. 1993. Lymphotoxin β , a novel member of the TNF family that forms a heteromeric complex with lymphotoxin on the cell surface. *Cell* 72: 847-856.
2. Crowe, P.D., et al. 1994. A lymphotoxin- β -specific receptor. *Science* 264: 707-710.
3. Nakamura, T., et al. 1995. The murine lymphotoxin- β receptor cDNA: isolation by the signal sequence trap and chromosomal mapping. *Genomics* 30: 312-319.
4. Nalabolu, S.R., et al. 1996. Genes in a 220-kb region spanning the TNF cluster in human MHC. *Genomics* 31: 215-222.
5. Warzocha, K., et al. 1997. Identification of two lymphotoxin β isoforms expressed in human lymphoid cell lines and non-Hodgkin's lymphomas. *Biochem. Biophys. Res. Commun.* 238: 273-276.

CHROMOSOMAL LOCATION

Genetic locus: LTB (human) mapping to 6p21.3.

SOURCE

LT- β (G-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of LT- β of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-23561 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ 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

LT- β (G-19) is recommended for detection of LT- β 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 LT- β siRNA (h): sc-39828, LT- β shRNA Plasmid (h): sc-39828-SH and LT- β shRNA (h) Lentiviral Particles: sc-39828-V.

Molecular Weight of LT- β : 25 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.

SELECT PRODUCT CITATIONS

1. Hewagama, A., et al. 2009. Stronger inflammatory/cytotoxic T cell response in women identified by microarray analysis. *Genes Immun.* : E-Published.

PROTOCOLS

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