

LT β R (M-110): sc-98786

BACKGROUND

Tumor necrosis factor (TNF) is a pleiotropic cytokine whose function is mediated by two distinct cell surface receptors, designated TNF-R1 and TNF-R2, which are expressed on most cell types. TNF function is primarily mediated through TNF-R1 signaling. Both receptors belong to the growing TNF receptor superfamily which includes FAS antigen, CD40 and lymphotoxin β receptor (LT β R). LT β R is activated upon association with the heterotrimeric lymphotoxin LT- α_1/β_2 , resulting in NF κ B activation and the initiation of apoptosis. LT β R is expressed on the surface of most cell types, excluding T and B lymphocytes, and is involved in lymphoid organ development.

REFERENCES

- Smith, C.A., Farrah, T. and Goodwin, R.G. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. *Cell* 76: 959-962.
- Crowe, P.D., VanArsdale, T.L., Walter, B.N., Ware, C.F., Hession, C., Ehrenfels, B., Browning, J.L., Din, W.S., Goodwin, R.G. and Smith, C.A. 1994. A lymphotoxin β -specific receptor. *Science* 264: 707-710.
- Nagata, S. and Golstein, P. 1995. The FAS death factor. *Science* 267: 1449-1456.
- Ware, C.F., VanArsdale, T.L., Crowe, P.D. and Browning, J.L. 1995. The ligands and receptor of the lymphotoxin system. *Curr. Top. Microbiol. Immunol.* 198: 175-218.
- VanArsdale, T.L., VanArsdale, S.L., Force, W.R., Walter, B.N., Mosialos, G., Kieff, E., Reed, J.C. and Ware, C.F. 1997. Lymphotoxin β receptor signaling complex: role of tumor necrosis factor receptor-associated factor 3 recruitment in cell death and activation of nuclear factor κ B. *Proc. Natl. Acad. Sci. USA* 94: 2460-2465.
- Futterer, A., Mink, K., Luz, A., Kosco-Vilbois, M.H. and Pfeffer, K. 1998. The lymphotoxin β receptor controls organogenesis and affinity maturation in peripheral lymphoid tissues. *Immunity* 9: 59-70.
- Lee, Y., Chin, R.K., Christiansen, P., Sun, Y., Tumanov, A.V., Wang, J., Chervonsky, A.V. and Fu, Y.X. 2006. Recruitment and activation of naive T cells in the islets by lymphotoxin β receptor-dependent tertiary lymphoid structure. *Immunity* 25: 499-509.

CHROMOSOMAL LOCATION

Genetic locus: Ltbr (mouse) mapping to 6 F3.

SOURCE

LT β R (M-110) is a rabbit polyclonal antibody raised against amino acids 41-150 mapping near the N-terminus of LT β R of mouse origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

LT β R (M-110) is recommended for detection of LT β R of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

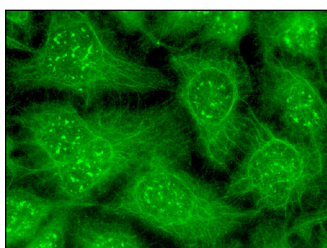
Suitable for use as control antibody for LT β R siRNA (h): sc-40241, LT β R siRNA (m): sc-40242, LT β R shRNA Plasmid (h): sc-40241-SH, LT β R shRNA Plasmid (m): sc-40242-SH, LT β R shRNA (h) Lentiviral Particles: sc-40241-V and LT β R shRNA (m) Lentiviral Particles: sc-40242-V.

Molecular Weight of LT β R: 55-60 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



LT β R (M-110): sc-98786. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **LT β R (H-2): sc-398929** or **LT β R (31G4D8): sc-53716**, our highly recommended monoclonal alternatives to LT β R (M-110).