

LT β R (31G4D8): sc-53716

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

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4. Ware, C.F., et al. 1995. The ligands and receptor of the lymphotoxin system. *Curr. Top. Microbiol. Immunol.* 198: 175-218.
5. VanArsdale, T.L., et al. 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.
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7. Lee, Y., et al. 2006. Recruitment and activation of naive T cells in the islets by lymphotoxin b receptor-dependent tertiary lymphoid structure. *Immunity* 25: 499-509.
8. Columba-Cabezas, S., et al. 2006. Suppression of established experimental autoimmune encephalomyelitis and formation of meningeal lymphoid follicles by lymphotoxin β receptor-Ig fusion protein. *J. Neuroimmunol.* 179: 76-86.
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CHROMOSOMAL LOCATION

Genetic locus: LTBR (human) mapping to 12p13.31.

SOURCE

LT β R (31G4D8) is a mouse monoclonal antibody raised against LT β R of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} 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 (31G4D8) is recommended for detection of LT β R of 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)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

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

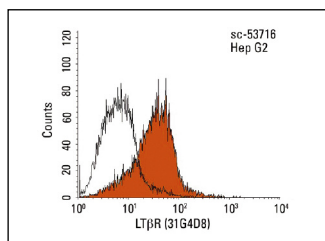
Molecular Weight of LT β R: 55-60 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker[™] compatible goat anti-mouse IgG-HRP: sc-2031 (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).

DATA



LT β R (31G4D8): sc-53716. Indirect FCM analysis of HepG2 cells stained with LT β R (31G4D8), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG2 β : sc-3879.

STORAGE

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

PROTOCOLS

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