

Lad (L-16): sc-28522

BACKGROUND

Lad (TSAd, TSA_d, F2771, SH2D2A, SH2 domain protein 2A) is a cytoplasmic adapter protein that undergoes tyrosine-phosphorylation and influences T cell activation. Lad (SH2D2A) mRNA is present in peripheral blood leukocytes, thymus and spleen, and accumulates in the cytoplasm during T cell activation. The Lad gene maps to chromosome 1q23.1 in a region where alterations are characteristic to lymphomas.

REFERENCES

- Spurkland, A., et al. 1998. Molecular cloning of a T cell-specific adapter protein (TSA_d) containing an Src homology (SH) 2 domain and putative SH3 and phosphotyrosine binding sites. *J. Biol. Chem.* 273: 4539-4546.
- Choi, Y.B., et al. 1999. Lad, an adapter protein interacting with the SH2 domain of p56lck, is required for T cell activation. *J. Immunol.* 163: 5242-5249.
- Dai, K.Z., et al. 2000. The SH2D2A gene encoding the T-cell-specific adapter protein (TSA_d) is localized centromeric to the CD1 gene cluster on human chromosome 1. *Immunogenetics* 51: 179-185.
- Dai, K.Z., et al. 2001. The T cell regulator gene SH2D2A contributes to the genetic susceptibility of multiple sclerosis. *Genes Immun.* 2: 263-268.
- Drappa, J., et al. 2003. Impaired T cell death and lupus-like autoimmunity in T cell-specific adapter protein-deficient mice. *J. Exp. Med.* 198: 809-821.
- Nejad, S., et al. 2004. cDNA cloning of a rat orthologue of SH2D2A encoding T-cell-specific adaptor protein (TSA_d): expression in T and NK cells. *Immunogenetics* 56: 338-342.
- Dai, K.Z., et al. 2004. Transcriptional activation of the SH2D2A gene is dependent on a cyclic adenosine 5'-monophosphate-responsive element in the proximal SH2D2A promoter. *J. Immunol.* 172: 6144-6151.
- LocusLink Report (LocusID: 9047). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: SH2D2A (human) mapping to 1q23.1; Sh2d2a (mouse) mapping to 3 F1.

SOURCE

Lad (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Lad of mouse origin.

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-28522 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Lad (L-16) is recommended for detection of Lad of mouse, rat and 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).

Lad (L-16) is also recommended for detection of Lad in additional species, including bovine and porcine.

Suitable for use as control antibody for Lad siRNA (h): sc-105604, Lad siRNA (m): sc-146634, Lad shRNA Plasmid (h): sc-105604-SH, Lad shRNA Plasmid (m): sc-146634-SH, Lad shRNA (h) Lentiviral Particles: sc-105604-V and Lad shRNA (m) Lentiviral Particles: sc-146634-V.

Molecular Weight of Lad: 52 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.