

Lad (I-20): sc-28523

BACKGROUND

Lad (TSAD, TSAd, 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 (TSAd) 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 (TSAd) 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 (TSAd): 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 (I-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-28523 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 (I-20) 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), immunoprecipitation [1-2 µg per 100-500 µg 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).

Lad (I-20) 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.

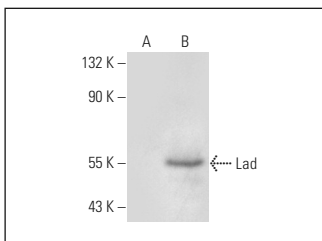
Molecular Weight of Lad: 52 kDa.

Positive Controls: Lad (h): 293T Lysate: sc-177448.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Lad (I-20): sc-28523. Western blot analysis of Lad expression in non-transfected: sc-117752 (A) and human Lad transfected: sc-177448 (B) 293T whole cell lysates.

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.