

# SLA2 (5-RE27): sc-135561

## BACKGROUND

SLA2 (Src-like-adapter 2), also known as C20orf156 or SLAP2, is a 261 amino acid protein that exists as four alternatively spliced isoforms which localize to either the cytoplasm or to the cell membrane and contain one SH2 domain and one SH3 domain. Expressed predominately in tissues of the immune system, including thymus, spleen and lymph nodes, SLA2 functions as an adaptor protein that negatively regulates T-cell receptor (TCR) signaling and may inhibit T-cell activation. SLA2 interacts with Zap-70 and is subject to posttranslational phosphorylation. The gene encoding SLA2 maps to human chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome.

## REFERENCES

- Holland, S.J., et al. 2001. Functional cloning of Src-like adapter protein-2 (SLAP-2), a novel inhibitor of antigen receptor signaling. *J. Exp. Med.* 194: 1263-1276.
- Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606577. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Pandey, A., et al. 2002. A novel Src homology 2 domain-containing molecule, Src-like adapter protein-2 (SLAP-2), which negatively regulates T cell receptor signaling. *J. Biol. Chem.* 277: 19131-19138.
- Loreto, M.P., et al. 2002. Functional cooperation between c-Cbl and Src-like adaptor protein 2 in the negative regulation of T-cell receptor signaling. *Mol. Cell. Biol.* 22: 4241-4255.
- Loreto, M.P. and McGlade, C.J. 2003. Cloning and characterization of human Src-like adaptor protein 2 and a novel splice isoform, SLAP-2-v. *Oncogene* 22: 266-273.
- Dragone, L.L., et al. 2006. Src-like adaptor protein (SLAP) regulates B cell receptor levels in a c-Cbl-dependent manner. *Proc. Natl. Acad. Sci. USA* 103: 18202-18207.
- Pakuts, B., et al. 2007. The Src-like adaptor protein 2 regulates colony-stimulating factor-1 receptor signaling and down-regulation. *J. Biol. Chem.* 282: 17953-17963.

## CHROMOSOMAL LOCATION

Genetic locus: SLA2 (human) mapping to 20q11.23.

## SOURCE

SLA2 (5-RE27) is a mouse monoclonal antibody raised against recombinant SLA2 protein of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

SLA2 (5-RE27) is recommended for detection of SLA2 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SLA2 siRNA (h): sc-76503, SLA2 shRNA Plasmid (h): sc-76503-SH and SLA2 shRNA (h) Lentiviral Particles: sc-76503-V.

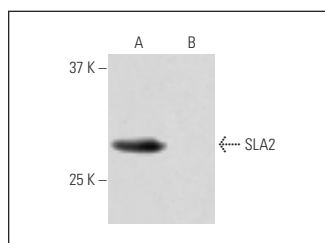
Molecular Weight of SLA2: 29 kDa.

Positive Controls: human SLA2 transfected 293T whole cell lysate or K-562 whole cell lysate: sc-2203.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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



SLA2 (5-RE27): sc-135561. Western blot analysis of SLA2 expression in human SLA2 transfected (A) and non-transfected (B) 293T whole cell lysates.

## STORAGE

Store at 4° 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.