# SANTA CRUZ BIOTECHNOLOGY, INC.

# SLA2 (H-75): sc-366097



# BACKGROUND

SLA2 (Src-like-adapter 2), also known as C20orf156 or SLAP2, is a 261 amino acid protein that exists as 4 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 post-translational 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., Liao, X.C., Mendenhall, M.K., Zhou, X., Pardo, J., Chu, P., Spencer, C., Fu, A., Sheng, N., Yu, P., Pali, E., Nagin, A., Shen, M., Yu, S., Chan, E., Wu, X., Li, C., Woisetschlager, M., Aversa, G., 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.
- 2. 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., Ibarrola, N., Kratchmarova, I., Fernandez, M.M., Constantinescu, S.N., Ohara, O., Sawasdikosol, S., Lodish, H.F. and Mann, M. 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., Berry, D.M. and McGlade, C.J. 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., Myers, M.D., White, C., Gadwal, S., Sosinowski, T., Gu, H. and Weiss, A. 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., Debonneville, C., Liontos, L.M., Loreto, M.P. and McGlade, C.J. 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; Sla2 (mouse) mapping to 2 H1.

#### SOURCE

SLA2 (H-75) is a rabbit polyclonal antibody raised against amino acids 31-105 mapping near the N-terminus of SLA2 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

SLA2 (H-75) is recommended for detection of SLA2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

SLA2 (H-75) is also recommended for detection of SLA2 in additional species, including equine.

Suitable for use as control antibody for SLA2 siRNA (h): sc-76503, SLA2 siRNA (m): sc-153480, SLA2 shRNA Plasmid (h): sc-76503-SH, SLA2 shRNA Plasmid (m): sc-153480-SH, SLA2 shRNA (h) Lentiviral Particles: sc-76503-V and SLA2 shRNA (m) Lentiviral Particles: sc-153480-V.

Molecular Weight of SLA2: 29 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

#### **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.

#### **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 or our catalog for detailed protocols and support products.