SorLA (H-300): sc-33822

SANTA CRUZ®
BIOTECHNOLOGY

The Power to Question

BACKGROUND

Sortilin-related receptor, also known as sorting protein-related receptor containing LDLR class A (SorLA), is a Type I membrane protein that may be involved in cell-cell interaction. SorLA, a single transmembrane receptor, binds LDL (the main cholesterol-carrying lipoprotein of plasma) and transports it into cells by endocytosis. SorLA is synthesized as a proreceptor which is processed to the mature form by a furin-like propeptidase. It can also bind to RAP, receptor-associated protein. SorLA is a multifunctional endocytis receptor important in lipoprotein and protease uptake. The N-terminal propeptide, which is removed, can be cleaved by furin or homologous proteases. Endogenous SorLA binds the neuropeptide head activator (HA) and is important for HA signaling and function. SorLA is expressed mainly in brain (cerebral cortex, cerebellum and the occipital pole), but can also be found in liver, spinal cord, kidney, testis and pancreas.

CHROMOSOMAL LOCATION

Genetic locus: SORL1 (human) mapping to 11q24.1; Sorl1 (mouse) mapping to 9 A5.1.

SOURCE

SorLA (H-300) is a rabbit polyclonal antibody raised against amino acids 86-385 mapping within an N-terminal extracellular domain of SorLA of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

SorLA (H-300) is recommended for detection of SorLA 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).

SorLA (H-300) is also recommended for detection of SorLA in additional species, including canine and bovine.

Suitable for use as control antibody for SorLA siRNA (h): sc-44375, SorLA siRNA (m): sc-44376, SorLA shRNA Plasmid (h): sc-44375-SH, SorLA shRNA Plasmid (m): sc-44376-SH, SorLA shRNA (h) Lentiviral Particles: sc-44375-V and SorLA shRNA (m) Lentiviral Particles: sc-44376-V.

Molecular Weight of SorLA: 250 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, EOC 20 whole cell lysate: sc-364187 or rat brain extract: sc-2392.

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.

DATA
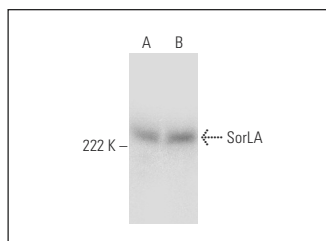
SorLA (H-300): sc-33822. Western blot analysis of SorLA expression in Neuro-2A (**A**) and EOC 20 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nunes, A.F., Amaral, J.D., Lo, A.C., Fonseca, M.B., Viana, R.J., Callaerts-Vegh, Z., D'Hooge, R. and Rodrigues, C.M. 2012. TUDCA, a bile acid, attenuates amyloid precursor protein processing and amyloid-β deposition in APP/PS1 mice. Mol. Neurobiol. 45: 440-454.

2. Simões, A.E., Pereira, D.M., Amaral, J.D., Nunes, A.F., Gomes, S.E., Rodrigues, P.M., Lo, A.C., D'Hooge, R., Steer, C.J., Thibodeau, S.N., Borralho, P.M. and Rodrigues, C.M. 2013. Efficient recovery of proteins from multiple source samples after TRIzol® or TRIzol®LS RNA extraction and long-term storage. BMC Genomics 14: 181.

3. Ciarlo, E., Massone, S., Penna, I., Nizzari, M., Gigoni, A., Dieci, G., Russo, C., Florio, T., Cancedda, R. and Pagano, A. 2013. An intronic ncRNA-dependent regulation of SORL1 expression affecting Aβ formation is upregulated in post-mortem Alzheimer's disease brain samples. Dis. Model Mech. 6: 424-433.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfation
Guaranteed

Try **SorLA (7D7B11): sc-101426** or **SorLA (48): sc-136073**, our highly recommended monoclonal alternatives to SorLA (H-300).