



Anti-human SorCS1 Antibody

ORDERING INFORMATION

Catalog Number: AF3457

Lot Number: XJA02

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human SorCS1

Immunogen: NS0-derived rhSorCS1

Ig Type: goat IgG

Applications: Western blot
Immunocytochemistry
Direct ELISA

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant human SorCS1 (rhSorCS1; aa 111 - 1099; Accession # Q8WY21 with S231G substitution). Human SorCS1 specific IgG was purified by human SorCS1 affinity chromatography. SorCS1 is a 130 kDa type I transmembrane protein and is one of five proteins in the Vps 10p-domain (Vps10p-D) receptor family. SorCS1, within the SorCS1-3 subgroup, contains both a Vps10p-D and a leucine-rich domain. By alternative splicing, four different isoforms that differ only in their cytoplasmic domains can be generated. The different isoforms showed different subcellular distribution. SorCS1 is synthesized as a proprotein from which the mature protein is generated by proteolytic cleavage of the N-terminal propeptide. A soluble 80 kDa SorCS1 extracellular (luminal) domain can also be generated by cleavage at a juxtamembrane region. SorCS1 extracellular domain has been shown to bind PDGF-BB. The amino acid sequence of human and mouse SorCS1 share 93% identity.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human SorCS1 in the applications listed below. In direct ELISAs and Western blots, this antibody shows approximately 20% cross-reactivity with rmSorCS1 and less than 1% cross-reactivity with rhSorCS3.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human SorCS1. The detection limit for rhSorCS1 is approximately 5 ng/lane under non-reducing and reducing conditions.

Immunocytochemistry - This antibody can be used at a concentration of 10 µg/mL to detect SorCS1 in differentiated neural stem cells. Cells were fixed with PBS containing 4% paraformaldehyde for 20 minutes at room temperature and blocked with PBS containing 10% normal donkey serum, 0.1% Triton X-100, and 1% BSA for 45 minutes at room temperature. After blocking, cells were incubated with diluted primary antibody for 3 hours at room temperature followed by R&D Systems NorthernLights™ 557 donkey anti-goat IgG (Catalog # NL001) at room temperature for 1 hour. Between each step, cells were washed with PBS containing 0.1% BSA.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human SorCS1. The detection limit for rhSorCS1 is approximately 0.5 ng/well.

Optimal dilutions should be determined by each laboratory for each application.