

DESCRIPTION

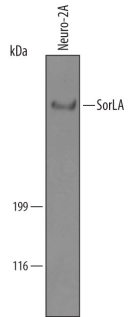
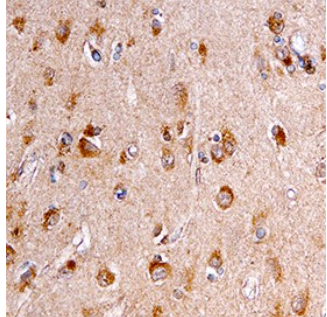
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse SorLA in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse SorLA Ser82-Asn367 Accession # Q92673
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Mouse SorLA by Western Blot. Western blot shows lysates of Neuro-2A mouse neuroblastoma cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human SorLA Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5699) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for SorLA at approximately 330 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>SorLA in Human Brain. SorLA was detected in immersion fixed paraffin-embedded sections of human brain using Sheep Anti-Human/Mouse SorLA Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5699) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neurons. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SorLA (Sorting protein-related receptor containing LDLR class A repeats; also LR11 and SorL1) is a 250-330 kDa, monomeric member of the SORL1 family of proteins. It is expressed on the cell surface (10%) and in Golgi/ER membranes (90%) of neurons and vascular smooth muscle cells. SorLA binds apoE-rich lipoproteins plus the 39 kDa RAP. It also acts as an intracellular sorting receptor for APP. In this context, it blocks transport of APP into compartments that exhibit β-secretase activity, thus interfering with Aβ peptide generation. Human SorLA is a type I transmembrane glycoprotein 2214 amino acids (aa) in length. It contains a 28 aa signal sequence, a 53 aa propeptide, and a 2133 aa mature molecule. The mature molecule contains a 2056 aa extracellular domain (ECD) (aa 82-2137) and a short 56 aa cytoplasmic tail. The ECD is highly modular, containing five BNR/Asp-box repeats (aa 136-573), five LDLR class B repeats (aa 800-1013), one EGF-like domain (aa 1026-1072), 11 LDLR class A domains (aa 1076-1551) and six FN type III repeats (aa 1554-2023). Multiple potential splice variants exist. There are alternative start sites at Met1057 and Met1155, plus a 63 aa substitution for aa 1-1153 and a 19 aa substitution for aa 1-1404. Over aa 82-367, human SorLA shares 93% aa identity with mouse SorLA.