

Anti-Shank1 (C-terminal region) Antibody

Catalog # AN1951

Specification

Anti-Shank1 (C-terminal region) Antibody - Product Information

Primary Accession Reactivity Host Clonality Isotype Calculated MW

<u>09WV48</u> Bovine Mouse Mouse Monoclonal IgG1 226335

Anti-Shank1 (C-terminal region) Antibody - Additional Information

Gene ID Other Names Spank1; Sstrip; Shank1a; Shank1; ProSAP

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

78957

Precautions Anti-Shank1 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

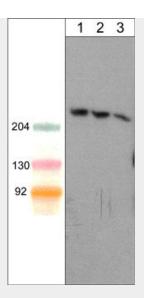
Anti-Shank1 (C-terminal region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Shank1 (C-terminal region) Antibody - Images





Western blot of mouse brain lysate. The blot was probed with mouse monoclonal anti-Shank1 (C-terminal region) antibody at 1:250 (lane 1), 1:500 (lane 2), or 1:1000 (lane 3).

Anti-Shank1 (C-terminal region) Antibody - Background

A variety of anchoring and scaffold proteins that are associated with postsynaptic density (PSD) proteins have been discovered. In particular, PSD-95, GRIP, and Homer have been reported to be anchoring proteins for NMDA, AMPA, and metabotropic glutamate receptors. Shank1 is a synaptic protein that may bridge the NMDA receptor complex and the mGluR receptor complex. The Shank family includes Shank1, Shank2 (ProSAP1), and Shank3 (ProSAP2). These proteins contain several domains involved in protein-protein interactions. These include ankyrin repeats, an SH3 domain, a PDZ domain, a SAM domain, and a proline-rich region. The PDZ domain of Shank directly interacts with the C-terminal region of GKAP, which can bind to the GK domain of PSD-95 family members. The proline-rich region of Shank directly interacts with the EVH1 domain of Homer. Shank1 knock-out mice have altered PSD protein composition, reduced size of dendritic spines, and smaller PSDs. In addition, these mice have weaker basal synaptic transmission and show increased anxiety-related behavior.