

Anti-Shank1 (C-terminal region) Antibody

Catalog # AN1951

Product Information

Application	WB
Primary Accession	Q9WV48
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M369
Calculated MW	226335

Additional Information

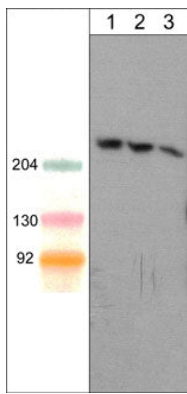
Gene ID	78957
Other Names	Spank1; Sstrip; Shank1a; Shank1; ProSAP
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Shank1 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

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.

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.