

Product datasheet for **TA389205**

SHANK1 Mouse Antibody [Clone ID: M369]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M369
Applications:	WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M369 was generated from a sequence corresponding to amino acids in the C-terminal region of rat Shank1. This sequence has high homology to human and mouse Shank1.
Specificity:	This antibody detects a 225 kDa* protein corresponding to the molecular mass of Shank1 on SDS-PAGE immunoblots of adult mouse brain.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	225
Database Link:	Q9Y566



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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.

Note:

Protein G purified tissue culture supernatant.