

## Anti-Shank1 Monoclonal Antibody

### ORDERING INFORMATION

Catalog No.: 56469 (clone S22-21)  
Size: 100ug in PBS, pH 7.4; 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

### BACKGROUND

Shank proteins are a family of scaffold proteins identified through their interaction with a variety of membrane and cytoplasmic proteins. Shank proteins at postsynaptic sites of excitatory synapses play roles in signal transmission into the postsynaptic neuron. Shank proteins are crucial in receptor tyrosine kinase signaling. Recent studies suggest that disruption of glutamate receptors at the Shank-postsynaptic platform could contribute to the destruction of postsynaptic density which underlies synaptic dysfunction and loss in Alzheimer's disease. Shank1 might be relevant to human autism spectrum disorders due to its differential role in specific cognitive processes along with its importance in synapse structure and function.

### SPECIFICATION SUMMARY

**Antigen:** Fusion protein corresponding to aa 469-691 (SH3/PDZ domains) of rat Shank1 (accession no. Q9WV48). This sequence is 96% homologous with human and 100% homologous with mouse Shank1.

**Host Species:** Mouse

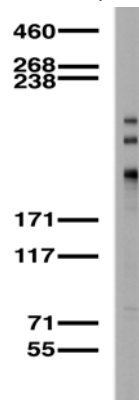
**Antibody Class:** IgG1

### SPECIFICITY

This antibody recognizes human, mouse, and rat Shank 1. It does not react with Shank2 or 3.

### APPLICATIONS

**Immunoblotting:** use at 1-10ug/ml. Bands of ~190-220kDa (alternative splice variants) are detected.



Adult rat brain membrane probed with #56469

**Immunohistochemistry and**

**Immunocytochemistry:** use at 0.1-1ug/ml

**Immunofluorescence:** use at 1-10ug/ml

These are recommended concentrations.

User should determine optimal concentrations for their application.

**Positive control:** Adult rat brain.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freezing and thawing.

*For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.*