

Anti-Shank3 Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 56463 (clone S69-46)
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; specifically, Shank3 can mediate Erk-MAPK and P13K signaling which is crucial for tubule formation. Shank 3 is also one of the latest genes to be associated with autism. A mutation in a single copy of Shank3 on chromosome 22q13 can result in communication disorders.

SPECIFICATION SUMMARY

Antigen: Synthetic peptide corresponding to aa 840-857 (PEKLPGLSLRKGIPRTKSV) of rat Shank3 (accession no. Q9JLU4).

Host Species: Mouse

Antibody Class: IgG2b

SPECIFICITY

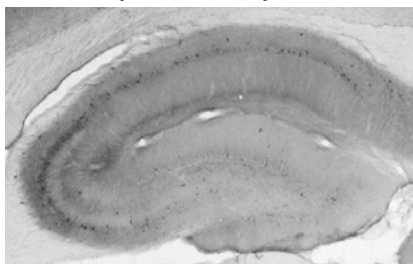
This antibody recognizes human, mouse, and rat Shank3. It does not cross-react with Shank1 or Shank2.

APPLICATIONS

Immunoblotting: use at 1-10ug/ml. A band of ~40kDa is detected.

Immunohistochemistry and

Immunocytochemistry: use at 0.1-1ug/ml



Adult rat hippocampus

Immunofluorescence: use at 1-10ug/ml. These are recommended concentrations. User should determine optimal concentrations for their application.

Positive control: Adult rat brain or lysate of COS cells transiently expressing Shank3.

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.