

Anti-Pan-Shank Pan [N23B/49] Standard Size Ab02158-10.0

Variable region sequences were determined by Dr. James Trimmer at the University of California, Davis, as supported by National Institutes of Health BRAIN Initiative award U24 NS109113.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Kappa

Clone Number: N23B/49

Alternative Name(s) of Target: N23B/49R; SH3 and multiple ankyrin repeat domains protein 2; Cortactin-binding protein 1; CortBP1; GKAP/SAPAP-interacting protein; Proline-rich synapse-associated protein 1; ProSAP1; SPANK-3

UniProt Accession Number of Target Protein: Q9QX74

Published Application(s): ICC, WB, IF

Published Species Reactivity: pan, Rat, Human, Mouse

Immunogen: This antibody was raised by immunising BALB/c mice with a fusion protein amino acids 84-309 (SH3/PDZ domains) of rat Shank2.

Specificity: This antibody is specific for shank1, shank2 and shank3. Shank2 seems to be an adapter protein in the postsynaptic density (PSD) of excitatory synapses that interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors, and the actin-based cytoskeleton. May play a role in the structural and functional organization of the dendritic spine and synaptic junction.

Application Notes: This antibody was used for immunocytochemistry on the hippocampal cultures of rats and mice (MacGillavry et al, 2016; PMID:26547831) (Tao-Cheng et al, 2010; PMID:20347015) (Suh et al, 2010; PMID:20118925). Immunofluorescence was performed on hippocampal neuronal cells of mice using this antibody (Pham et al, 2010; PMID:20573181) (Ricciardi et al, 2012; PMID:22922712). This antibody was used to perform a western blot on human brain samples (Pham et al, 2010; PMID:20573181).

Antibody First Published in: Andrews et al. A toolbox of IgG subclass-switched recombinant monoclonal antibodies for enhanced multiplex immunolabeling of brain eLife. 2019; 8: e43322. [PMID:30667360](#)

Note on publication: This article describes the generation of a library of recombinant monoclonal antibodies (R-mAbs) from a pool of mAb-producing hybridomas for neuroscience research.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.