

## Shank 2

Cat.No. 162 202; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

### Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H <sub>2</sub> O, then aliquot and store at -20°C until use.
Applications	<b>WB:</b> 1 : 1000 (AP staining) <b>IP:</b> not tested yet <b>ICC:</b> 1 : 500 <b>IHC:</b> 1 : 500 (see remarks) <b>IHC-P/FFPE:</b> not tested yet
Immunogen	Recombinant protein corresponding to AA 1042 to 1475 from rat Shank2 (UniProt Id: Q9QX74)
Reactivity	Reacts with: rat (Q9QX74), mouse (Q80Z38). Other species not tested yet.
Specificity	Specific for shank 2.
Remarks	<b>IHC:</b> This antibody requires mild fixation. recommended protocol

### TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Shank 1, 2 and 3 are major proteins of the postsynaptic density (PSD). They are composed of several protein-protein interaction domains like PDZ-, homer- and ABP 1-binding domains which allow them to crosslink ionotropic and metabotropic glutamate receptor complexes with each other and to the actin-cytoskeleton.

### Selected References SYSY Antibodies

Cell-Type-Specific Shank2 Deletion in Mice Leads to Differential Synaptic and Behavioral Phenotypes.  
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*The Journal of neuroscience : the official journal of the Society for Neuroscience* (2018) 38(17): 4076-4092. **WB, IHC; tested species: mouse**

Glia-to-neuron transfer of miRNAs via extracellular vesicles: a new mechanism underlying inflammation-induced synaptic alterations.

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The Microglial Innate Immune Receptor TREM2 Is Required for Synapse Elimination and Normal Brain Connectivity.  
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*Frontiers in cellular neuroscience* (2015) 9: 438. **WB**

### Selected General References

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Shank expression is sufficient to induce functional dendritic spine synapses in aspiny neurons.

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Linkage of the actin cytoskeleton to the postsynaptic density via direct interactions of Abp1 with the ProSAP/Shank family.

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