

Shank 2

Cat.No. 162 204; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

Data Sheet

Reconstitution/Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 up to 1 : 5000 (AP staining) IP: not tested yet ICC: 1 : 1000 up to 1 : 2000 IHC: 1 : 500 IHC-P/FFPE: 1 : 500
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. K.O. PubMed: 29970987

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

Dendritic spine morphology and memory formation depend on postsynaptic Caskin proteins.
Bencsik N, Pusztai S, Borbély S, Fekete A, Dülk M, Kis V, Pesti S, Vas V, Szűcs A, Buday L, Schlett K, et al. Scientific reports (2019) 91: 16843. . **WB, IP, ICC; tested species: mouse**

Cell-Type-Specific Shank2 Deletion in Mice Leads to Differential Synaptic and Behavioral Phenotypes.
Kim R, Kim J, Chung C, Ha S, Lee S, Lee E, Yoo YE, Kim W, Shin W, Kim E
The Journal of neuroscience : the official journal of the Society for Neuroscience (2018) 3817: 4076-4092. . **IHC; tested species: mouse**

Inositol polyphosphate multikinase mediates extinction of fear memory.
Park J, Longo F, Park SJ, Lee S, Bae M, Tyagi R, Han JH, Kim S, Santini E, Klann E, Snyder SH, et al. Proceedings of the National Academy of Sciences of the United States of America (2019) : . . **IHC; tested species: mouse**

An Autaptic Culture System for Standardized Analyses of iPSC-Derived Human Neurons.
Rhee HJ, Shaib AH, Rehbach K, Lee C, Seif P, Thomas C, Gideons E, Guenther A, Krutenko T, Hebisch M, Peitz M, et al. Cell reports (2019) 277: 2212-2228.e7. . **ICC; tested species: human**

Localization of group II and III metabotropic glutamate receptors at pre- and postsynaptic sites of inner hair cell ribbon synapses.
Klotz L, Wendler O, Frischknecht R, Shigemoto R, Schulze H, Enz R
FASEB journal : official publication of the Federation of American Societies for Experimental Biology (2019) : fj201901543R. . **IHC; tested species: mouse**

Serine-Arginine Protein Kinase SRPK2 Modulates the Assembly of the Active Zone Scaffolding Protein CAST1/ERC2.
Arancibia D, Lira M, Cruz Y, Barrera DP, Montenegro-Venegas C, Godoy JA, Garner CC, Inestrosa NC, Gundelfinger ED, Zamorano P, Torres VI, et al. Cells (2019) 811: . . **ICC; tested species: rat**

The Exocyst Component Exo70 Modulates Dendrite Arbor Formation, Synapse Density, and Spine Maturation in Primary Hippocampal Neurons.
Lira M, Arancibia D, Orrego PR, Montenegro-Venegas C, Cruz Y, García J, Leal-Ortiz S, Godoy JA, Gundelfinger ED, Inestrosa NC, Garner CC, et al. Molecular neurobiology (2018) : . . **ICC; tested species: rat**

Shank2 Deletion in Parvalbumin Neurons Leads to Moderate Hyperactivity, Enhanced Self-Grooming and Suppressed Seizure Susceptibility in Mice.
Lee S, Lee E, Kim R, Kim J, Lee S, Park H, Yang E, Kim H, Kim E
Frontiers in molecular neuroscience (2018) 11: 209. . **IHC; KO verified; tested species: mouse**