

PSD 95

Cat.No. 124 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: not recommended IHC: not recommended IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 18 to 32 from rat PSD95 (UniProt Id: P31016)
Reactivity	Reacts with: human (P78352), rat (P31016), mouse (Q62108), hamster. Other species not tested yet.
Specificity	Specific for PSD 95.
matching control	124-0P

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

PSD 95 (postsynaptic density protein **95** kDa, also called **SAP 90**: synapse associated protein of **90** kDa and **DLG 4**) is a component of postsynaptic densities in central synapses. It contains three PDZ domains. The first and second PDZ domain localizes NMDA receptors and K⁺ channels to synapses, the third binds to neuroligins which are neuronal cell adhesion molecules that interact with β-neurexins and form intercellular junctions. Thus different PDZ domains of PSD 95 might be specialized for distinct functions.

Selected References SYSY Antibodies

DHHC5 interacts with PDZ domain 3 of post-synaptic density-95 (PSD-95) protein and plays a role in learning and memory. Li Y, Hu J, Höfer K, Wong AM, Cooper JD, Birnbaum SG, Hammer RE, Hofmann SL
The Journal of biological chemistry (2010) 285(17): 13022-31. **WB**

Pyk2 Signaling through Grb1 and RhoA GTPase is Required for Amyloid-β Oligomer Triggered Synapse Loss.

Lee S, Salazar SV, Cox TO, Strittmatter SM

The Journal of neuroscience : the official journal of the Society for Neuroscience (2019) : . **WB; tested species: mouse**

The primate-specific peptide Y-P30 regulates morphological maturation of neocortical dendritic spines.

Neumann JR, Dash-Wagh S, Jack A, Räk A, Jüngling K, Hamad MIK, Pape HC, Kreutz MR, Puskarjov M, Wahle P

PloS one (2019) 14(2): e0211151. **WB; tested species: rat**

The Temporal Dynamics of Arc Expression Regulate Cognitive Flexibility.

Wall MJ, Collins DR, Chery SL, Allen ZD, Pastuzyn ED, George AJ, Nikolova VD, Moy SS, Philpot BD, Shepherd JD, Müller J, et al.

Neuron (2018) : . **WB; tested species: mouse**

Lack of presynaptic interaction between glucocorticoid and CB1 cannabinoid receptors in GABA- and glutamatergic terminals in the frontal cortex of laboratory rodents.

Bitencourt RM, Alpár A, Cinquina V, Ferreira SG, Pinheiro BS, Lemos C, Ledent C, Takahashi RN, Sialana FJ, Lubec G, Cunha RA, et al.

Neurochemistry international (2015) 90: 72-84. **WB**

Gender-dependent and genotype-sensitive monoaminergic changes induced by polychlorinated biphenyl 153 in the rat brain.

Dervola KS, Johansen EB, Walaas SI, Fonnum F

Neurotoxicology (2015) 50: 38-45. **WB**

Human N-methyl D-aspartate receptor antibodies alter memory and behaviour in mice.

Planagumà J, Leyboldt F, Mannara F, Gutiérrez-Cuesta J, Martín-García E, Aguilar E, Titulaer MJ, Petit-Pedrol M, Jain A, Balice-Gordon R, Lakadamyali M, et al.

Brain : a journal of neurology (2015) 138(Pt 1): 94-109. **WB; tested species: mouse**

Dysregulated postsynaptic density and endocytic zone in the amygdala of human heroin and cocaine abusers.

Okvist A, Fagergren P, Whittard J, Garcia-Osta A, Drakenberg K, Horvath MC, Schmidt CJ, Keller E, Bannon MJ, Hurd YL

Biological psychiatry (2011) 69(3): 245-52. **WB; tested species: human**

Altered postsynaptic-density-levels of caldendrin in the para-chloroamphetamine-induced serotonin syndrome but not in the rat ketamine model of psychosis.

Smalla KH, Sahin J, Putzke J, Tischmeyer W, Gundelfinger ED, Kreutz MR

Neurochemical research (2009) 34(8): 1405-9. **WB**

APP/PS1KI bigenic mice develop early synaptic deficits and hippocampus atrophy.

Breyhan H, Wirths O, Duan K, Marcello A, Rettig J, Bayer TA

Acta neuropathologica (2009) 117(6): 677-85. **WB; tested species: mouse**

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Norris EH, Strickland S

Proceedings of the National Academy of Sciences of the United States of America (2007) 104(33): 13473-8. **WB**

Astrocytes regulate GluR2 expression in motor neurons and their vulnerability to excitotoxicity.

Van Damme P, Bogaert E, Dewil M, Hersmus N, Kiraly D, Scheveneels W, Bockx I, Braeken D, Verpoorten N, Verhoeven K, Timmerman V, et al.

Proceedings of the National Academy of Sciences of the United States of America (2007) 104(37): 14825-30. **WB**

Molecular anatomy of a trafficking organelle.

Takamori S, Holt M, Stenius K, Lemke EA, Grønborg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, et al.

Cell (2006) 127(4): 831-46. **WB**

Immunisolation of two synaptic vesicle pools from synaptosomes: a proteomics analysis.

Morciano M, Burré J, Corvey C, Karas M, Zimmermann H, Volkandt W

Journal of neurochemistry (2005) 95(6): 1732-45. **WB; tested species: rat**

Differential recruitment of Kv1.4 and Kv4.2 to lipid rafts by PSD-95.

Wong W, Schlichter LC

The Journal of biological chemistry (2004) 279(1): 444-52. **WB**

Distribution of synaptic vesicle proteins in the mammalian retina identifies obligatory and facultative components of ribbon synapses.

Von Kriegstein K, Schmitz F, Link E, Südhof TC

The European journal of neuroscience (1999) 11(4): 1335-48. **WB**