

Mouse PSD95 Monoclonal Antibody | anti-Dlg4 antibody

PSD95 Antibody: Biotin

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103280	Mouse	Mouse, Rat, Bovine, Human	Immunohistochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

PSD95; Monoclonal Antibody; PSD95 Antibody: Biotin; PSD 95; PSD-95; DLG4; SAP90; Synapse-associated protein 90; Postsynaptic density protein 95; Disks large homolog 4; anti-Dlg4 antibody

PRODUCT SPECIFICATIONS

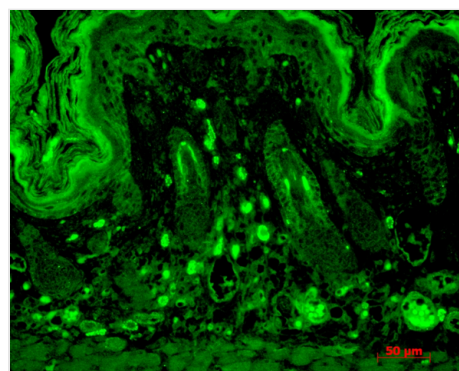
Host	Mouse
Reactivity	Mouse, Rat, Bovine, Human
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	7E3
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	724
Applicable Applications for anti-Dlg4 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), WB (Western Blot)
Conjugate	Biotin
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



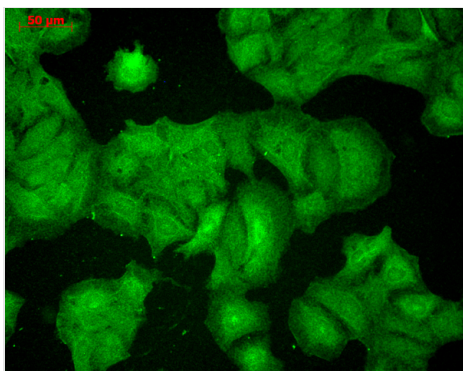
WB (Western Blot)

Western Blot analysis of Rat brain membrane lysate showing detection of PSD95 protein using Mouse Anti-PSD95 Monoclonal Antibody, Clone 7E3. Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:1000.



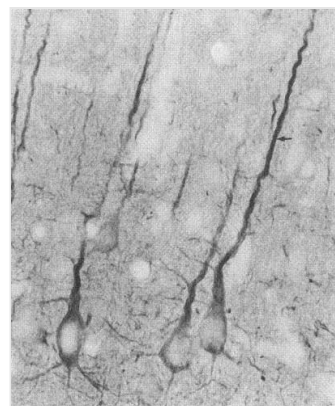
IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-PSD95 Monoclonal Antibody, Clone 7E3. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Basal cell staining in the epidermis, some hair follicle staining, dermal staining. Backskin obtained from transgenic mice.



ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-PSD95 Monoclonal Antibody, Clone 7E3. Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20 degree C. Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Filamentous-like staining.



IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-PSD95 Monoclonal Antibody, Clone 7E3. Tissue: Neocortex. Species: Rat. Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:1000.

ADDITIONAL INFORMATION

Related Product Information for anti-Dlg4 antibody

Background Info: Detects a ~100kDa protein corresponding to the molecular mass of PSD-95 on SDS PAGE immunoblots. Additional cross-reactive bands are detected at ~80kDa and ~50kDa in rat and mouse samples.

Scientific Background: Postsynaptic Density protein 95 (PSD95), also known as Synapse associated protein 90kDa, is a member of the membrane-associated guanylate kinase (MAGUK) family of proteins. PSD95 is a scaffolding protein and is involved in the assembly and function of the postsynaptic density complex (1). These family members consist of an N-terminal variable segment followed by three amino-terminal PDZ domains, an upstream SH3 domain and an inactive carboxyl-terminal guanylate kinase (GK) domain. The first and second PDZ domain localize NMDA receptors and K⁺ channels to synapses, and the third binds to neuroligins which are neuronal cell adhesion molecules that interact with b-neurexins and form intercellular junctions. PSD-95 also binds to neuronal nitric oxide synthase, possibly through interactions between PDZ domains present on both proteins (2). Thus different PDZ domains of PSD-95 might be specialized for distinct functions (3, 4). PSD95 participates in synaptic targeting of AMPA receptors through an indirect manner involving Stargazin and related transmembrane AMPA receptor regulatory proteins (TARPs) (5). The protein is implicated in experience dependent plasticity and plays an indispensable role in learning (6). Mutations in PSD95 are associated with autism (7).

Product Categories/Family for anti-Dlg4 antibody

Neuroscience; [Organelle Markers](#)

References

1. Chetkovich D.M., Bunn R.C., Kuo S.H., Kawasaki Y., Kohwi M., and Bredt D.S. (2002) J Neurosci. 22(15): 6415-25.
2. Cao J., Viholainen J.I., Dart C., Warwick H.K., Levland M.L. and Courtney M.J. (2005) J Cell Biol. 168(1): 117-26.
3. Kennedy M. (1997) Trends in Neurosci. 6: 264-268.
4. Irie M. et al. (1997) Science 277(5331): 1511-5.
5. Cai C. et al. (2006) J Biol Chem. 281: 4267-73.
6. Yao W.D. et al. (2004) Neuron 41: 625-38.
7. Cline H. (2005) Curr Biol. 15: R203-5.

NCBI AND UNIPROT INFORMATION

NCBI GI #	9665227
NCBI GeneID	29495
NCBI Accession #	NP_062567.1
NCBI GenBank Nucleotide #	NM_019621.1
UniProt Accession #	P31016 ; P97631
Molecular Weight	– Da
NCBI Official Full Name	disks large homolog 4
NCBI Official Synonym Full Names	discs, large homolog 4 (Drosophila)

NCBI Official Symbol	Dlg4
NCBI Official Synonym Symbols	Dlgh4; PSD95; Sap90
NCBI Protein Information	disks large homolog 4; PSD-95; SAP-90; discs large homolog 4; synapse-associated protein 90; postsynaptic density protein 95; synapse-associated protein SAP90
UniProt Protein Name	Disks large homolog 4
UniProt Gene Name	Dlg4
UniProt Synonym Gene Names	Dlgh4; Psd95; PSD-95; SAP-90; SAP90
UniProt Entry Name	DLG4_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/psd95-antibody-clone-7e3-immunohistochemistry-immunofluorescence-western-blot-elisa/103280>