

anti-Human, Rat PSD95 Polyclonal Antibody | anti-PSD95 antibody

Anti-PSD95 Antibody

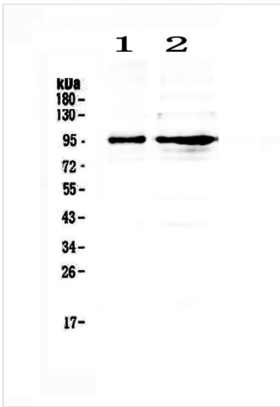
CATALOG #	REACTIVITY	APPLICATIONS
AAA46432	Human, Rat	Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PSD95; Polyclonal Antibody; Anti-PSD95 Antibody; Disks large homolog 4; Discs large homolog 4; DLG 4; DLG4; DLG4_HUMAN; FLJ97752; FLJ98574; Human post synaptic density protein 95; Human post-synaptic density protein 95; Post synaptic density protein 95; Postsynaptic density protein 95; PSD 95; PSD-95; SAP 90; SAP-90; SAP90; Synapse associated protein 90; Synapse-associated protein 90; Tax interaction protein 15 antibody; discs; large homolog 4 (Drosophila); anti-PSD95 antibody

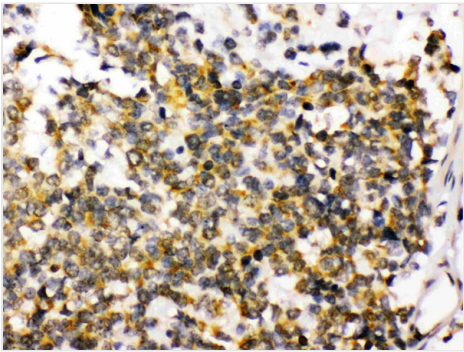
PRODUCT SPECIFICATIONS

Reactivity	Human, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	721
Applicable Applications for anti-PSD95 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human PSD95 recombinant protein (Position: H581-L724). Human PSD95 shares 100% amino acid (aa) sequence identity with both mouse and rat PSD95.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



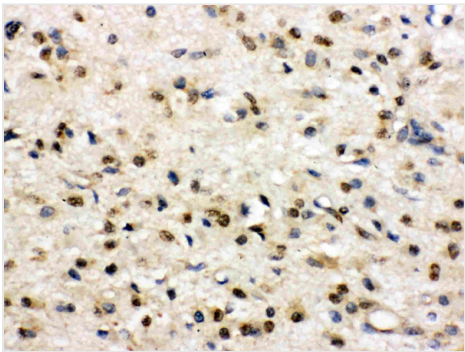
WB (Western Blot)

Figure 4. Western blot analysis of PSD95 using anti- PSD95 antibody (AAA46432).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat brain tissue lysates,Lane 2: mouse brain tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- PSD95 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PSD95 at approximately 95KD. The expected band size for PSD95 is at 80KD.



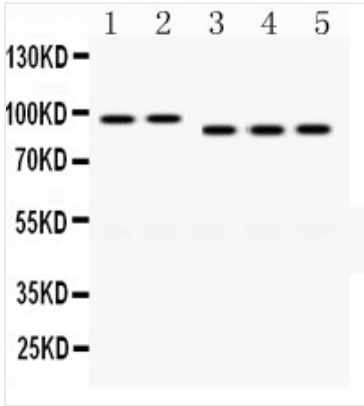
IHC (Immunohiostchemistry)

Figure 2. IHC analysis of PSD95 using anti-PSD95 antibody (AAA46432).PSD95 was detected in paraffin-embedded section of Human Glioma Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PSD95 Antibody (AAA46432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of PSD95 using anti-PSD95 antibody (AAA46432).PSD95 was detected in paraffin-embedded section of Human Glioma Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PSD95 Antibody (AAA46432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PSD95 using anti-PSD95 antibody (AAA46432).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: Rat Skeletal Muscle Tissue Lysate,Lane 2: Rat Cardiac Muscle Tissue Lysate,Lane 3: HELA Whole Cell Lysate,Lane 4: A549 Whole Cell Lysate,Lane 5: 293T Whole Cell Lysate.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PSD95 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PSD95 at approximately 95, 85KD. The expected band size for PSD95 is at 95, 80KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PSD95 antibody	Description: Rabbit IgG polyclonal antibody for Disks large homolog 4(DLG4) detection. Tested with WB, IHC-P in Human;Rat. Background: DLG4 discs large homolog 4, also known as PSD95 or SAP-90, is a protein that in humans is encoded by the DLG4 gene. It is a member of the membrane-associated guanylate kinase (MAGUK) family. This gene is mapped to 17p13.1. DLG4 can heteromultimerize with another MAGUK protein, DLG2, and is recruited into NMDA receptor and potassium channel clusters. These two MAGUK proteins may interact at postsynaptic sites to form a multimeric scaffold for the clustering of receptors, ion channels, and associated signaling proteins. Overexpression of DLG4 in hippocampal neurons could drive maturation of glutamatergic synapses. DLG4 can orchestrate synaptic development and it has a role in synapse stabilization and plasticity. Ubiquitination of DLG4 through an MDM2-mediated pathway can regulate AMPA receptor surface expression during synaptic plasticity.
References	1. "Entrez Gene: DLG4 discs, large homolog 4 (Drosophila)". 2. Colledge, M., Snyder, E. M., Crozier, R. A., Soderling, J. A., Jin, Y., Langeberg, L. K., Lu, H., Bear, M. F., Scott, J. D. Ubiquitination regulates PSD-95 degradation and AMPA receptor surface expression. Neuron 40: 595-607, 2003. 3. El-Husseini, A. E.-D., Schnell, E., Chetkovich, D. M., Nicoll, R. A., Brecht, D. S. PSD-95 involvement in maturation of excitatory synapses. Science 290: 1364-1368, 2000.

NCBI AND UNIPROT INFORMATION

NCBI GI #	192447426
NCBI GeneID	1742
NCBI Accession #	NP_001122299.1
NCBI GenBank Nucleotide #	NM_001128827.2
UniProt Accession #	P78352; Q92941; Q9UKK8; B7Z1S1; G5E939
Molecular Weight	80,125 Da
NCBI Official Full Name	disks large homolog 4 isoform 2
NCBI Official Synonym Full Names	discs large homolog 4
NCBI Official Symbol	DLG4
NCBI Official Synonym Symbols	PSD95; SAP90; SAP-90
NCBI Protein Information	disks large homolog 4
UniProt Protein Name	Disks large homolog 4
UniProt Gene Name	DLG4
UniProt Synonym Gene Names	PSD95; PSD-95; SAP-90; SAP90
UniProt Entry Name	DLG4_HUMAN

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/psd95-antibody-immunohistochemistry-western-blot-elisa/46432>