

Product datasheet

Anti-PSD93 antibody [EPR26468-112] ab289972

Recombinant RabMAb

[10 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-PSD93 antibody [EPR26468-112] |
| Description | Rabbit monoclonal [EPR26468-112] to PSD93 |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P, IP, WB Unsuitable for: Flow Cyt (Intra) or ICC/IF |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Human cerebellum tissue lysate; Mouse brain tissue lysate; Rat brain tissue lysate. IHC-P: Mouse cerebrum tissue; Rat cerebrum tissue; Human cerebrum tissue. IP: SH-SY5Y and Neuro-2a whole cell lysates. |
| General notes | DLG2 is an alternative name for PSD93. This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |

Clone number EPR26468-112

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab289972 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|---|
| IHC-P | | 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| IP | | 1/30. |
| WB | | 1/1000. Detects a band of approximately 25-110 kDa (predicted molecular weight: 97 kDa). |

Application notes Is unsuitable for Flow Cyt (Intra) or ICC/IF.

Target

Function Required for perception of chronic pain through NMDA receptor signaling. Regulates surface expression of NMDA receptors in dorsal horn neurons of the spinal cord. Interacts with the cytoplasmic tail of NMDA receptor subunits as well as inward rectifying potassium channels. Involved in regulation of synaptic stability at cholinergic synapses. Part of the postsynaptic protein scaffold of excitatory synapses.

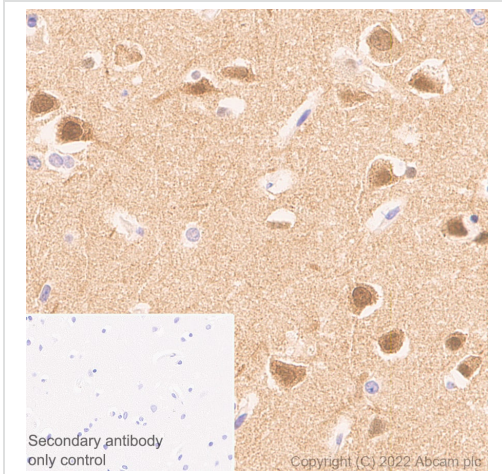
Sequence similarities Belongs to the MAGUK family.
Contains 1 guanylate kinase-like domain.
Contains 3 PDZ (DHR) domains.
Contains 1 SH3 domain.

Domain An N-terminally truncated L27 domain is predicted in isoform 2 at positions 1 through 27.

Post-translational modifications Palmitoylation of isoform 1 is not required for targeting to postsynaptic density.

Cellular localization Cell membrane. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell junction, synapse. Membrane. Cell projection, axon. Concentrated in soma and postsynaptic density of a subset of neurons.

Images

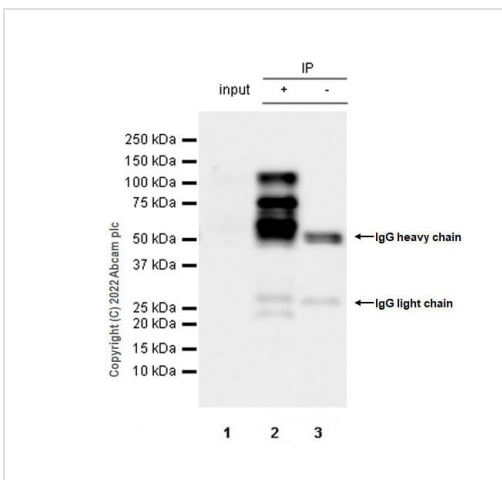


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PSD93 antibody [EPR26468-112] (ab289972)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labelling PSD93 with ab289972 at 1/500 followed by LeicaDS9800 (Bond™, Polymer Refine Detection). Positive staining on human cerebrum. The section was incubated with ab289972 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: PBS instead of primary antibody, followed by LeicaDS9800 (Bond™, Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunoprecipitation - Anti-PSD93 antibody [EPR26468-112] (ab289972)

PSD93 was immunoprecipitated from Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate with ab289972 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab289972 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(**ab131366**) was used at 1/5000 dilution.

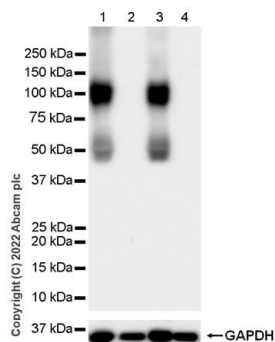
Lane 1: Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate 10 ug

Lane 2: ab289972 IP in Neuro-2a whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab289972 in Neuro-2a whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 32 seconds



Western blot - Anti-PSD93 antibody [EPR26468-112] (ab289972)

All lanes : Anti-PSD93 antibody [EPR26468-112] (ab289972) at 1/1000 dilution

Lane 1 : Mouse brain tissue lysate

Lane 2 : Mouse spleen tissue lysate

Lane 3 : Rat brain tissue lysate

Lane 4 : Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 97 kDa

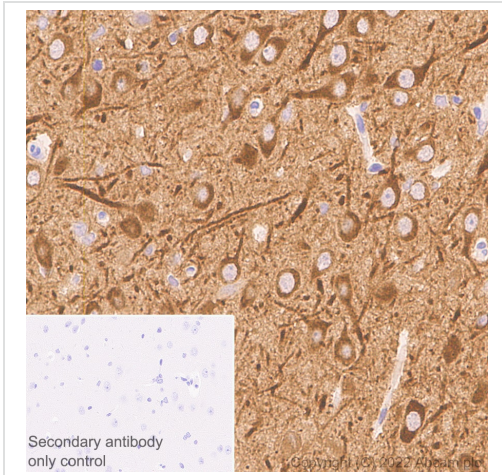
Observed band size: 25-110 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST

DLG2 has many splicing forms. The expression profile/molecular weight observed is consistent with that described in the literature (PMID: 14724236).

Negative control: spleen (PMID: 7590743)

Exposure time: 15 seconds

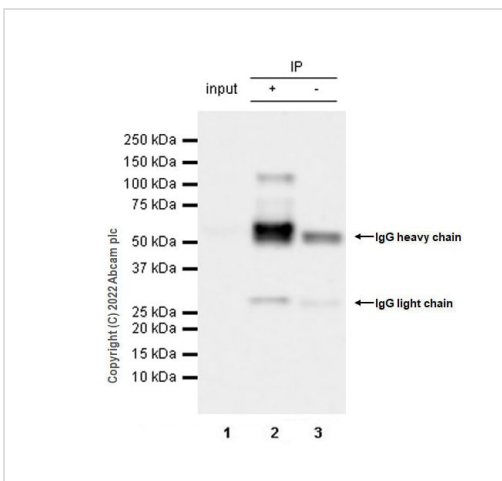


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PSD93 antibody [EPR26468-112] (ab289972)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labelling PSD93 with ab289972 at 1/500 followed by LeicaDS9800 (Bond™, Polymer Refine Detection). Positive staining on rat cerebrum. The section was incubated with ab289972 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: PBS instead of primary antibody, followed by LeicaDS9800 (Bond™, Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunoprecipitation - Anti-PSD93 antibody [EPR26468-112] (ab289972)

PSD93 was immunoprecipitated from SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate with ab289972 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab289972 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(**ab131366**) was used at 1/5000 dilution.

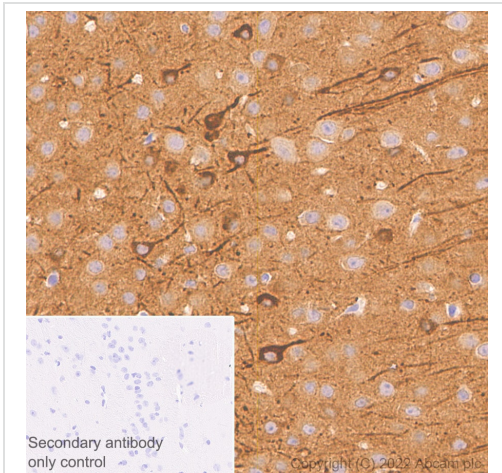
Lane 1: SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate 10 ug

Lane 2: ab289972 IP in SH-SY5Y whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab289972 in SH-SY5Y whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 32 seconds

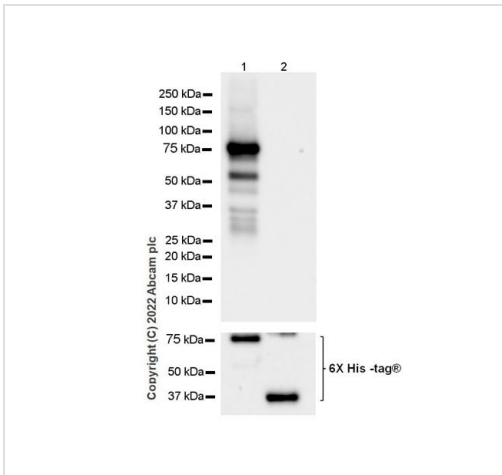


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PSD93 antibody [EPR26468-112] (ab289972)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labelling PSD93 with ab289972 at 1/500 followed by LeicaDS9800 (Bond™, Polymer Refine Detection) was used. Positive staining on mouse cerebrum. The section was incubated with ab289972 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™, Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-PSD93 antibody [EPR26468-112] (ab289972)

All lanes : Anti-PSD93 antibody [EPR26468-112] (ab289972) at 1/1000 dilution

Lane 1 : His-tagged Human DLG2 recombinant protein (20ng)

Lane 2 : His-tagged Human DLG1 recombinant protein (20ng)

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 97 kDa

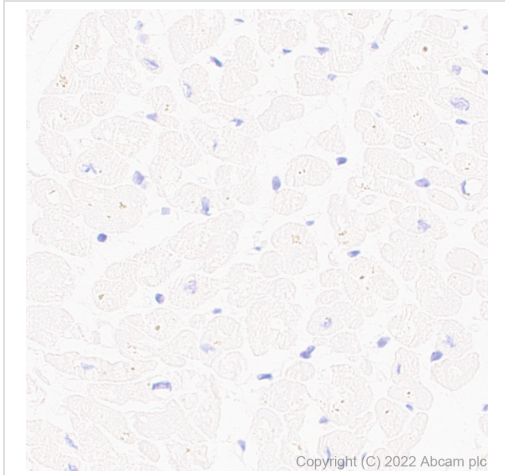
Observed band size: 25-110 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

This antibody does not cross-react with human DLG1.

Both recombinant proteins were made in-house and expressed from E.coli expression systems.

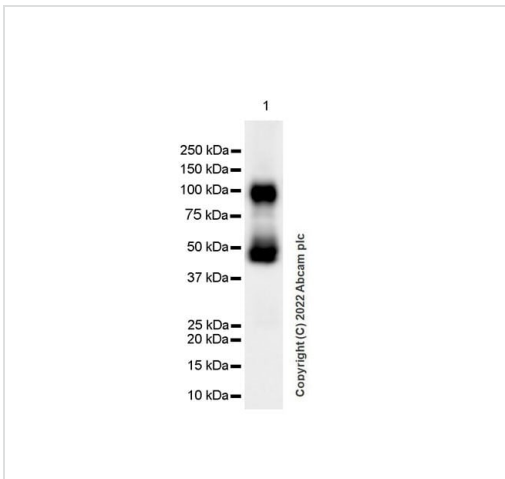
Exposure time: 15 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PSD93 antibody [EPR26468-112] (ab289972)

Immunohistochemical analysis of paraffin-embedded Human cardiac muscle tissue labelling PSD93 with ab289972 at 1/500 (1.222 followed by LeicaDS9800 (Bond™, Polymer Refine Detection) was used. **Negative control:** No staining on human cardiac muscle. The section was incubated with ab289972 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin..

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Western blot - Anti-PSD93 antibody [EPR26468-112] (ab289972)

Anti-PSD93 antibody [EPR26468-112] (ab289972) at 1/1000 dilution + Human cerebellum tissue lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution





Predicted band size: 97 kDa

Observed band size: 25-110 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST
DLG2 has many splicing forms. The expression profile/molecular weight observed is consistent with that described in the literature (PMID: 14724236).

Exposure time: 5.5 seconds

Why choose a recombinant antibody?

| | |
|---|---|
|  Research with confidence Consistent and reproducible results |  Long-term and scalable supply Recombinant technology |
|  Success from the first experiment Confirmed specificity |  Ethical standards compliant Animal-free production |

Anti-PSD93 antibody [EPR26468-112] (ab289972)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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