

# PSD-95 Monoclonal Antibody

Synapse-associated protein 90; SAP-90; SAP90  Observed Band  Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked current by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.		
Reactivity	Catalog No	YP-mAb-12796
Applications  Gene Name  DLG4  Protein Name  Disks large homolog 4  Immunogen  The antiserum was produced against synthesized peptide derived from human PSD-95. AA range:253-302  Specificity  PSD-95 Monoclonal Antibody detects endogenous levels of PSD-95 protein.  Formulation  Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  Source  Monoclonal, Mouse, IgG  Purification  The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.  Dilution  WB 1:500-1:2000  Concentration  1 mg/ml  Purity  ≥90%  Storage Stability  -20°C/1 year  Synonyms  DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band  Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density, Cell junction, synapse, Cell yorgenous, clerking cyling protein presynapse in the presynapse in the presynapse of th	Isotype	IgG
Gene Name         DLG4           Protein Name         Disks large homolog 4           Immunogen         The antiserum was produced against synthesized peptide derived from human PSD-95. AA range:253-302           Specificity         PSD-95 Monoclonal Antibody detects endogenous levels of PSD-95 protein.           Formulation         Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.           Source         Monoclonal, Mouse, IgG           Purification         The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.           Dilution         WB 1:500-1:2000           Concentration         1 mg/ml           Purity         ≥90%           Storage Stability         -20°C/1 year           Synonyms         DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90           Observed Band         95kD           Cell Pathway         Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse, cytoplasm. Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse, every papse, e	Reactivity	Human;Mouse;Rat
Protein Name   Disks large homolog 4	Applications	WB
Immunogen	Gene Name	DLG4
PSD-95. AA range:253-302  Specificity PSD-95 Monoclonal Antibody detects endogenous levels of PSD-95 protein.  Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  Source Monoclonal, Mouse, IgG  Purification The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.  Dilution WB 1:500-1:2000  Concentration 1 mg/ml  Purity 290% Storage Stability -20°C/1 year  Synapse-associated protein 90; SAP-90; SAP90  Observed Band Oskypapse-associated protein 90; SAP-90; SAP90  Cell Pathway Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, acon Cell projection, dendritic spine. Cell projection, dendrite. Cell projection, asin presynaptic density of neurons in the forebrain. Als in presynaptic plasticity synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density, domain:The PDZ doma 3 mediates interaction with ADR18, function:Interacts with the cytoplasmic tail on NIMDA receptor signaling meanments. Required for synaptic plasticity associated with NIMDA receptor signaling acid-evoked curren by retaining the channel intracellularly. May regulate the intracellular Hardicking the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellularly. May requiate the intracellular Hardicking the protein and content in the protein and curren by retaining the channel intracellularly. May requiate the intracellular Hardicking the protein and content in the protein and curren by retaining the channel intracellularly. May requiate the intracellular trafficking the protein and content and content and	Protein Name	Disks large homolog 4
Formulation  Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  Source  Monoclonal, Mouse, IgG  Purification  The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.  Dilution  WB 1:500-1:2000  Concentration  1 mg/ml  Purity  ≥90%  Storage Stability  -20°C/1 year  Synonyms  DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density on eurons in the forebrain. Als in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/IHRS-dependent targeting to post-synaptic density, domain:The PDZ domain and shear-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCNA acid-evoked curren by retaining the channel intracellularity. May regulate the intracellularity. May regulate the intracellularity.	Immunogen	
Source         Monoclonal, Mouse, IgG           Purification         The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.           Dilution         WB 1:500-1:2000           Concentration         1 mg/ml           Purity         ≥90%           Storage Stability         -20°C/1 year           Synonyms         DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90           Observed Band         95kD           Cell Pathway         Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Als in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.           Tissue Specificity         Brain.           Function         domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density, domain: The PDZ domain as mediates interaction with ADR1B, function: Interacts with the cytoplasmic tail on NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellular trafficing of the channel intracellular trafficiency.	Specificity	PSD-95 Monoclonal Antibody detects endogenous levels of PSD-95 protein.
Purification  The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.  Dilution  WB 1:500-1:2000  Concentration  1 mg/ml  Purity  ≥90%  Storage Stability  -20°C/1 year  Synonyms  DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band  95kD  Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Als in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density, domain:The PDZ doma 3 mediates interaction with ADR:IB, function:Interacts with the cytoplasmic tail of NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellularly. May requalet the intracellular trafficking of the channel intracellul	Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
affinity-chromatography using epitope-specific immunogen.  Dilution  WB 1:500-1:2000  Concentration  1 mg/ml  Purity  ≥90%  Storage Stability  -20°C/1 year  Synonyms  DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band  95kD  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Als in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Tissue Specificity  Brain.  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density, domain:The PDZ doma 3 mediates interaction with ADR18, function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellular trafficking the channel	Source	Monoclonal, Mouse,IgG
Concentration         1 mg/ml           Purity         ≥90%           Storage Stability         -20°C/1 year           Synonyms         DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90           Observed Band         95kD           Cell Pathway         Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic Spine. Cell projection, dendrite. Cell junction, synapses presynapse. High levels in postsynaptic density of neurons in the forebrain. Als in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.           Tissue Specificity         Brain.           Function         domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density, domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellularly. May requilate the intracellular trafficking of the channel intracellular trafficking of the channel intracellular trafficking to the channel intracellular trafficking the channel intracellular trafficking the channel intracellular traffick	Purification	•
Purity ≥90%  Storage Stability -20°C/1 year  Synonyms DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band 95kD  Cell Pathway Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Als in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity Brain.  Function domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density, domain:The PDZ doma 3 mediates interaction with ADR1B., function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellularly. May regulate the intracellular trafficking the channel intracellularly. May regulate the intracellular trafficking to	Dilution	WB 1:500-1:2000
Synonyms  DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band  95kD  Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked curren by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.	Concentration	1 mg/ml
Synonyms  DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95 Synapse-associated protein 90; SAP-90; SAP90  Observed Band  95kD  Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells on axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density., domain:The PDZ domain a mediates interaction with ADR1B., function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked current by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.	Purity	≥90%
Synapse-associated protein 90; SAP-90; SAP90  Observed Band  Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked current by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.	Storage Stability	-20°C/1 year
Cell Pathway  Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse presynapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4.  Tissue Specificity  Brain.  Function  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked current by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.	Synonyms	DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95; Synapse-associated protein 90; SAP-90; SAP90
postsynaptic density . Cell junction, synapse . Cytoplasm . Cell projection, axon Cell projection, dendritic spine . Cell projection, dendrite . Cell junction, synapse presynapse . High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells or axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4  Tissue Specificity  Brain.  Tissue Specificity  Brain.  domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked current by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.	Observed Band	95kD
domain:The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked current by retaining the channel intracellularly. May regulate the intracellular trafficking of	Cell Pathway	postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon. Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse, presynapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells on axon hillocks of Purkinje cells. Suppression of neuronal activity induces synaptic
HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ doma 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail on NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ACCN3 acid-evoked currently by retaining the channel intracellularly. May regulate the intracellular trafficking of the channel intracellularly.	Tissue Specificity	Brain.
	Function	HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ domain 3 mediates interaction with ADR1B.,function:Interacts with the cytoplasmic tail of NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or



## UpingBio technology Co.,Ltd





density., similarity: Belongs to the MAGUK family., similarity: Contains 1 guanylate kinase-like domain., similarity: Contains 1 SH3 domain., similarity: Contains 2 PDZ (DHR) domains., similarity: Contains 3

#### Background

This gene encodes a member of the membrane-associated guanylate kinase (MAGUK) family. It heteromultimerizes 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. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

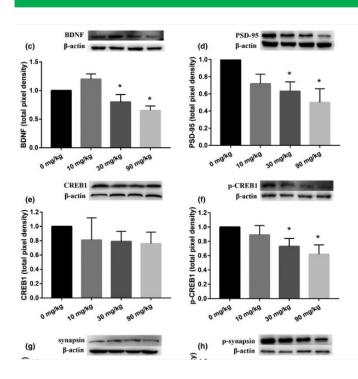
#### matters needing attention

Avoid repeated freezing and thawing!

### **Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

# **Products Images**



Western Blot analysis of various cells using PSD-95 Monoclonal Antibody