

## Anti-Drebrin DBN1 Rabbit Monoclonal Antibody Catalog # ABO13906

### Specification

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#### Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Product Information

Application	WB, IF, ICC, IP
Primary Accession	<a href="#">Q16643</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-Drebrin DBN1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Additional Information

**Gene ID** 1627

#### Other Names

Drebrin, Developmentally-regulated brain protein, DBN1, D0S117E

#### Calculated MW

71429 MW KDa

#### Application Details

WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>IP 1:50

#### Subcellular Localization

Cytoplasm. Cytoplasm, cell cortex. Cell junction. Cell projection. Cell projection, growth cone. In the absence of antigen, evenly distributed throughout subcortical regions of the T-cell membrane and cytoplasm. In the presence of antigen, distributes to the immunological synapse forming at the T-cell-APC contact area, where it localizes at the peripheral and distal supramolecular activation clusters (SMAC) (PubMed:20215400). Colocalized with DBN1, RUFY3 and F-actin at the transitional domain of the axonal growth cone (By similarity)..

#### Tissue Specificity

Brain neurons. Also found in the heart, placenta, skeletal muscle, kidney and pancreas. Expressed in peripheral blood lymphocytes, including T-cells (at protein level)..

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human Drebrin

#### Purification

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## **Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Protein Information**

**Name** DBN1

**Synonyms** D0S117E

### **Function**

Actin cytoskeleton-organizing protein that plays a role in the formation of cell projections (PubMed:<a href="http://www.uniprot.org/citations/20215400" target="\_blank">20215400</a>). Required for actin polymerization at immunological synapses (IS) and for the recruitment of the chemokine receptor CXCR4 to IS (PubMed:<a href="http://www.uniprot.org/citations/20215400" target="\_blank">20215400</a>). Plays a role in dendritic spine morphogenesis and organization, including the localization of the dopamine receptor DRD1 to the dendritic spines (By similarity). Involved in memory-related synaptic plasticity in the hippocampus (By similarity).

### **Cellular Location**

Cytoplasm. Cell projection, dendrite. Cytoplasm, cell cortex. Cell junction. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9QXS6}. Note=In the absence of antigen, evenly distributed throughout subcortical regions of the T-cell membrane and cytoplasm (PubMed:20215400). In the presence of antigen, distributes to the immunological synapse forming at the T-cell-APC contact area, where it localizes at the peripheral and distal supramolecular activation clusters (SMAC) (PubMed:20215400). Colocalized with RUFY3 and F-actin at the transitional domain of the axonal growth cone (By similarity) {ECO:0000250|UniProtKB:Q9QXS6, ECO:0000269|PubMed:20215400}

### **Tissue Location**

Expressed in the brain, with expression in the molecular layer of the dentate gyrus, stratum pyramidale, and stratum radiatum of the hippocampus (at protein level) (PubMed:8838578). Also expressed in the terminal varicosities distributed along dendritic trees of pyramidal cells in CA4 and CA3 of the hippocampus (at protein level) (PubMed:8838578). Expressed in pyramidal cells in CA2, CA1 and the subiculum of the hippocampus (at protein level) (PubMed:8838578) Expressed in peripheral blood lymphocytes, including T-cells (at protein level) (PubMed:20215400). Expressed in the brain (PubMed:8216329, Ref.2). Expressed in the heart, placenta, lung, skeletal muscle, kidney, pancreas, skin fibroblasts, gingival fibroblasts and bone-derived cells (Ref.2) {ECO:0000269|PubMed:20215400, ECO:0000269|PubMed:8216329, ECO:0000269|PubMed:8838578, ECO:0000269|Ref.2}

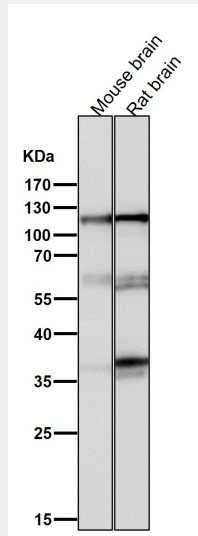
## **Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

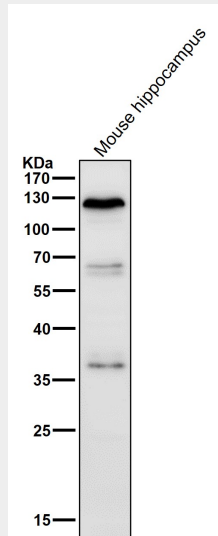
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

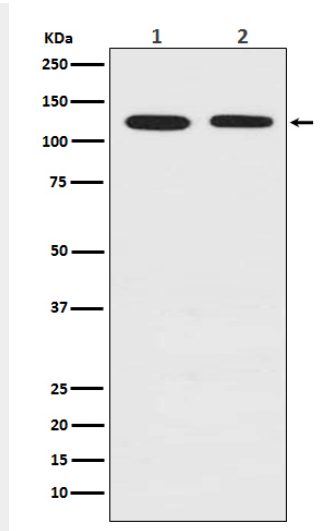
## Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:3W dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3W dilution for 1 hour at room temperature.



Western blot analysis of Drebrin expression in (1) HeLa cell lysate; (2) PC-12 cell lysate.

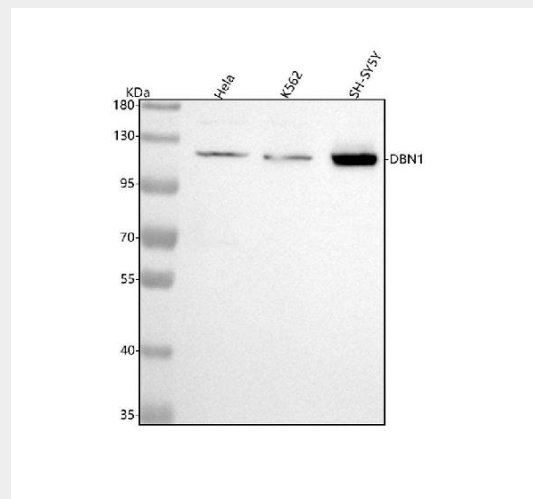


Figure 1. Western blot analysis of DBN1 using anti-DBN1 antibody (M05530).

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 30 ug of sample under reducing conditions.

- Lane 1: human Hela whole cell lysates,
- Lane 2: human K562 whole cell lysates,
- Lane 3: human SH-SY5Y whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-DBN1 antigen affinity purified monoclonal antibody (Catalog # M05530) at 1:500 overnight at 4°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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for DBN1 at approximately 120 kDa. The expected band size for DBN1 is at 71 kDa.