

Anti-Drebrin DBN1 Rabbit Monoclonal Antibody
Catalog # ABO13906**Specification****Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC, IP
Primary Accession	Q16643
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
ICC/IF 1:50-1:200
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:20215400). Required for actin polymerization at immunological synapses (IS) and for the recruitment of the chemokine receptor CXCR4 to IS (PubMed:20215400). 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}

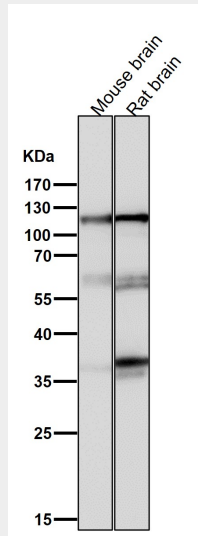
Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Protocols

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

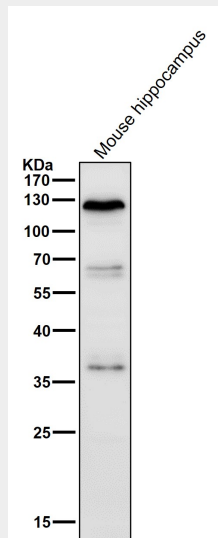
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

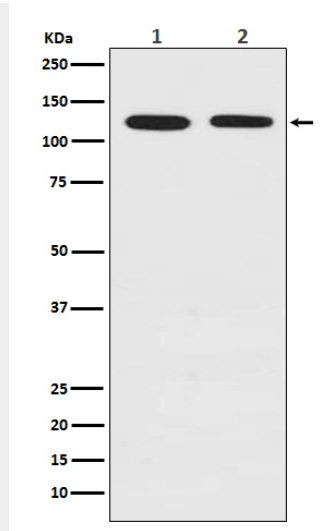
Anti-Drebrin DBN1 Rabbit Monoclonal Antibody - Images



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.

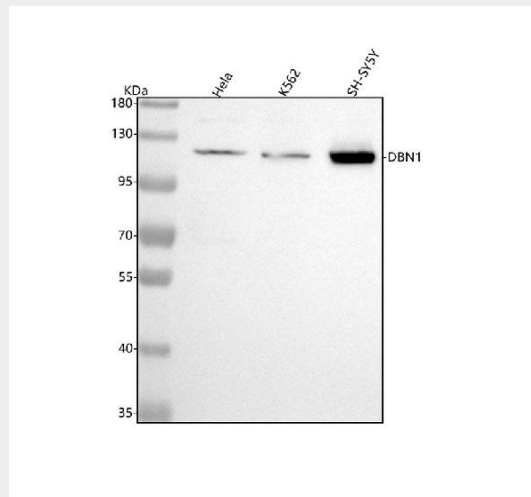


Figure 1. Western blot analysis of DBN1 using anti-DBN1 antibody (M05530).

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.