

Anti-Drebrin DBN1 Rabbit Monoclonal Antibody

Catalog # ABO13906

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.

Additional Information

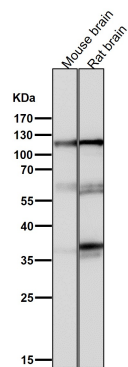
Gene ID	1627
Other Names	Drebrin, Developmentally-regulated brain protein, DBN1, D0S117E
Calculated MW	71429
Application Details	WB 1:500-1:2000 ICC/IF 1:50-1:200 IP 1:50
Subcellular Localization	Cytoplasm. Cytoplasm, cell cortex. Cell junction. Cell projection. Cell projection, growth cone. In the absence 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)..
Source	Eukaryota
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.
Clone Names	Clone: ABDC-4
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.

Protein Information

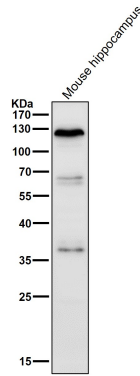
Name	DBN1
Synonyms	DOS117E
Function	Actin cytoskeleton-organizing protein that plays a role in the formation of cell projections (PubMed:20215400). Required for actin polymerization at immunological synapses (IS) and for the recruitment of the chemokine receptor CXCR4 to IS (PubMed:20215400). Plays a 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}

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.

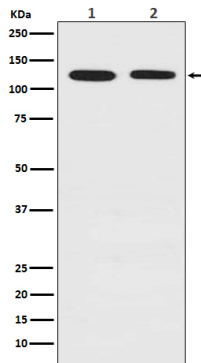


Figure 1. Western blot analysis of DBN1 using anti-DBN1 antibody (M05530).

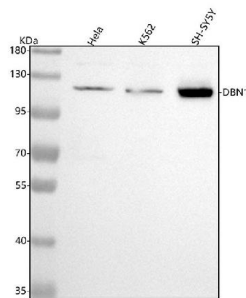
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.