

DBN1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22154c

Product Information

Application WB, E Primary Accession Q16643

Other Accession Q9QXS6, Q07266
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Clone Names RB56246
Calculated MW 71429

Additional Information

Gene ID 1627

Other Names Drebrin, Developmentally-regulated brain protein, DBN1, D0S117E

Target/Specificity This DBN1 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 194-228 amino acids from the Central

region of human DBN1.

Dilution WB~~1:2000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions DBN1 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name DBN1

Synonyms D0S117E

Function Actin cytoskeleton-organizing protein that plays a role in the formation of

cell projections (PubMed:<u>20215400</u>). 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}

Background

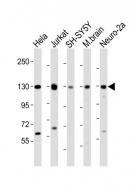
Drebrins might play some role in cell migration, extension of neuronal processes and plasticity of dendrites. Required for actin polymerization at immunological synapses (IS) and for CXCR4 recruitment to IS.

References

Toda M., et al. Biochem. Biophys. Res. Commun. 196:468-472(1993). Fisher L.W., et al. Neurosci. Res. Commun. 14:35-42(1994). Ota T., et al. Nat. Genet. 36:40-45(2004). Bechtel S., et al. BMC Genomics 8:399-399(2007). Schmutz J., et al. Nature 431:268-274(2004).

Images

All lanes: Anti-DBN1 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lane 4: mouse brain lysate Lane 5: Neuro-2a whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 71 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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