

**DBN1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9736a****Specification**

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**DBN1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q16643](#)**DBN1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 1627**Other Names**

Drebrin, Developmentally-regulated brain protein, DBN1, D0S117E

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**DBN1 Antibody (N-term) Blocking Peptide - 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}

**DBN1 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**DBN1 Antibody (N-term) Blocking Peptide - Images****DBN1 Antibody (N-term) Blocking Peptide - Background**

DBN1 is a cytoplasmic actin-binding protein thought to play a role in the process of neuronal growth. It is a member of the drebrin family of proteins that are developmentally regulated in the brain. A decrease in the amount of this protein in the brain has been implicated as a possible contributing factor in the pathogenesis of memory disturbance in Alzheimer's disease.

**DBN1 Antibody (N-term) Blocking Peptide - References**

Geraldo, S., et al. Nat. Cell Biol. 10(10):1181-1189(2008)Julien, C., et al. J. Neurosci. Res. 86(10):2292-2302(2008)Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)Olsen, J.V., et al. Cell 127(3):635-648(2006)