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DENND1B Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10381A

Specification

DENND1B Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q6P3S1
Other Accession	Q3U1T9, NP_001182144.1, NP_001182145.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**86552**
Antigen Region	**39-68**

DENND1B Antibody (N-term) - Additional Information

Gene ID 163486

Other Names
DENN domain-containing protein 1B, Connecdenn 2, Protein FAM31B, DENND1B, C1orf218, FAM31B

Target/Specificity
This DENND1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-68 amino acids from the N-terminal region of human DENND1B.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

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
DENND1B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DENND1B Antibody (N-term) - Protein Information

Name DENND1B (HGNC:28404)

Function Guanine nucleotide exchange factor (GEF) for RAB35 that acts as a regulator of T-cell receptor (TCR) internalization in TH2 cells (PubMed:20154091, PubMed:20937701, PubMed:24520163, PubMed:26774822). Acts by promoting the exchange of GDP to GTP, converting inactive GDP- bound RAB35 into its active GTP-bound form (PubMed:20154091, PubMed:20937701). Plays a role in clathrin-mediated endocytosis (PubMed:20154091). Controls cytokine production in TH2 lymphocytes by controlling the rate of TCR internalization and routing to endosomes: acts by mediating clathrin-mediated endocytosis of TCR via its interaction with the adapter protein complex 2 (AP-2) and GEF activity (PubMed:26774822). Dysregulation leads to impaired TCR down-modulation and recycling, affecting cytokine production in TH2 cells (PubMed:26774822).

Cellular Location
Cytoplasm, cytosol. Cytoplasmic vesicle, clathrin-coated vesicle

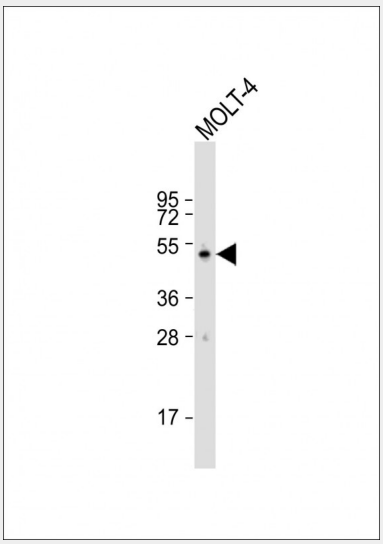
Tissue Location
Highly expressed in dendritic and natural killer cells and at lower levels in other myeloid lineage cells and in pituitary. Significantly up-regulated in effector memory T-cells as compared with naive T-cells.

DENND1B Antibody (N-term) - Protocols

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

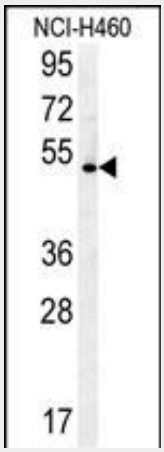
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DENND1B Antibody (N-term) - Images

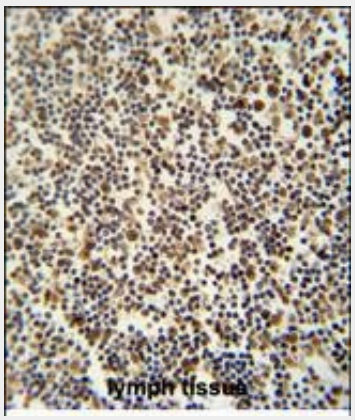


Anti-DENND1B Antibody (N-term) at 1:500 dilution + MOLT-4 whole cell lysate Lysates/proteins at

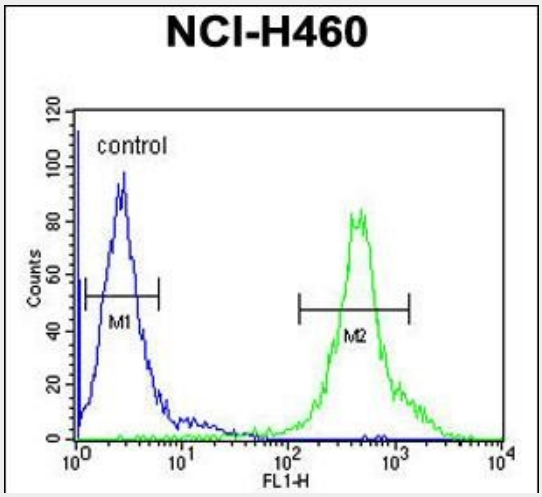
20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



DENND1B Antibody (N-term) (Cat. #AP10381a) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the DENND1B antibody detected the DENND1B protein (arrow).



DENND1B antibody (N-term) (Cat. #AP10381a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lymph tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DENND1B antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



DENND1B Antibody (N-term) (Cat. #AP10381a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit

secondary antibodies were used for the analysis.

DENND1B Antibody (N-term) - Background

Clathrin (see MIM 118955)-mediated endocytosis is a major mechanism for internalization of proteins and lipids. Members of the connecdenn family, such as DENND1B, function as guanine nucleotide exchange factors (GEFs) for the early endosomal small GTPase RAB35 (MIM 604199) and bind to clathrin and clathrin adaptor protein-2 (AP2; see MIM 601024). Thus, connecdenns link RAB35 activation with the clathrin machinery (Marat and McPherson, 2010 [PubMed 20154091]).

DENND1B Antibody (N-term) - References

Marat, A.L., et al. J. Biol. Chem. 285(14):10627-10637(2010)
Sleiman, P.M., et al. N. Engl. J. Med. 362(1):36-44(2010)
Venter, J.C., et al. Science 291(5507):1304-1351(2001)