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NEDD9 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14592c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q14511
Other Accession	NP_006394.1, NP_892011.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34579
Calculated MW	92861
Antigen Region	335-363

Additional Information

Gene ID	4739
Other Names	Enhancer of filamentation 1, hEF1, CRK-associated substrate-related protein, CAS-L, CasL, Cas scaffolding protein family member 2, Neural precursor cell expressed developmentally down-regulated protein 9, NEDD-9, Renal carcinoma antigen NY-REN-12, p105, Enhancer of filamentation 1 p55, NEDD9, CASL, CASS2
Target/Specificity	This NEDD9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 335-363 amino acids from the Central region of human NEDD9.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	NEDD9 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NEDD9 (HGNC:7733)

Function	Scaffolding protein which plays a central coordinating role for tyrosine-kinase-based signaling related to cell adhesion (PubMed:24574519). As a focal adhesion protein, plays a role in embryonic fibroblast migration (By similarity). May play an important role in integrin beta-1 or B cell antigen receptor (BCR) mediated signaling in B- and T-cells. Integrin beta-1 stimulation leads to recruitment of various proteins including CRKL and SHPTP2 to the tyrosine phosphorylated form (PubMed:9020138). Promotes adhesion and migration of lymphocytes; as a result required for the correct migration of lymphocytes to the spleen and other secondary lymphoid organs (PubMed:17174122). Plays a role in the organization of T-cell F- actin cortical cytoskeleton and the centralization of T-cell receptor microclusters at the immunological synapse (By similarity). Negatively regulates cilia outgrowth in polarized cysts (By similarity). Modulates cilia disassembly via activation of AURKA-mediated phosphorylation of HDAC6 and subsequent deacetylation of alpha-tubulin (PubMed:17604723). Positively regulates RANKL-induced osteoclastogenesis (By similarity). Required for the maintenance of hippocampal dendritic spines in the dentate gyrus and CA1 regions, thereby involved in spatial learning and memory (By similarity).
Cellular Location	Cytoplasm, cell cortex. Nucleus. Golgi apparatus. Cell projection, lamellipodium. Cytoplasm. Cell junction, focal adhesion. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, spindle pole. Cell projection, cilium. Cytoplasm, cytoskeleton, cilium basal body Basolateral cell membrane {ECO:0000250|UniProtKB:A0A8I3PDQ1}
Tissue Location	Expressed in B-cells (at protein level) (PubMed:9020138). Expressed in the respiratory epithelium of the main bronchi to the bronchioles in the lungs (at protein level) (PubMed:9584194). High levels detected in kidney, lung, and placenta (PubMed:9584194). Expressed in lymphocytes (PubMed:9497377)

Background

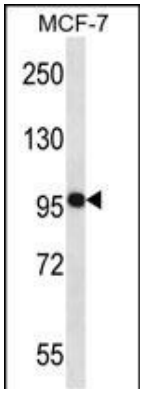
Docking protein which plays a central coordinating role for tyrosine-kinase-based signaling related to cell adhesion. May function in transmitting growth control signals between focal adhesions at the cell periphery and the mitotic spindle in response to adhesion or growth factor signals initiating cell proliferation. May play an important role in integrin beta-1 or B cell antigen receptor (BCR) mediated signaling in B-and T-cells. Integrin beta-1 stimulation leads to recruitment of various proteins including CRK, NCK and SHPTP2 to the tyrosine phosphorylated form.

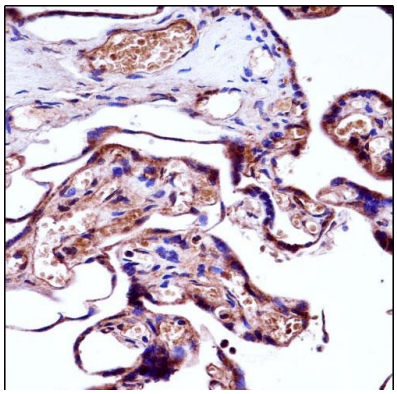
References

Corneveaux, J.J., et al. Hum. Mol. Genet. 19(16):3295-3301(2010)
Lucas, J.T. Jr., et al. Oncogene 29(31):4449-4459(2010)
Tedde, A., et al. Neurosci. Lett. 477(3):121-123(2010)
Malleter, M., et al. Int. J. Mol. Med. 25(6):897-903(2010)
Laumet, G., et al. J. Alzheimers Dis. 20(4):1181-1188(2010)

Images

NEDD9 Antibody (Center) (Cat. #AP14592c) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the NEDD9 antibody detected the NEDD9 protein (arrow).





NEDD9 Antibody (Center) (AP14592c)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NEDD9 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Overexpression of NEDD9 promotes cell invasion and metastasis in hepatocellular carcinoma.