

Anti-NEDD9 Antibody

Catalog # AP95973

Product Information

Application	WB, FC, IF/IC
Primary Accession	Q14511
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	92861

Additional Information

Gene ID	4739
Other Names	CASL; CASS2; 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
Target/Specificity	Recombinant fusion protein of human NEDD9 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

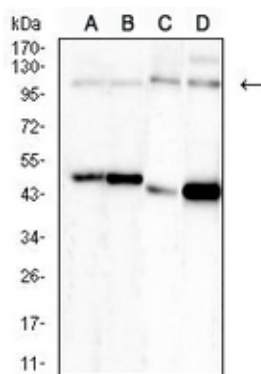
Cellular Location

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}

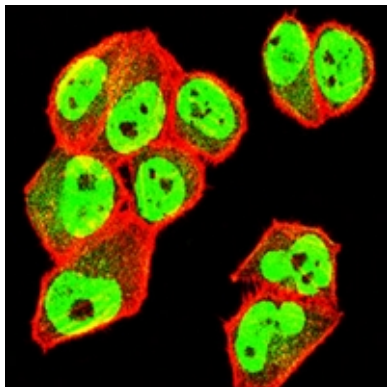
Tissue Location

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)

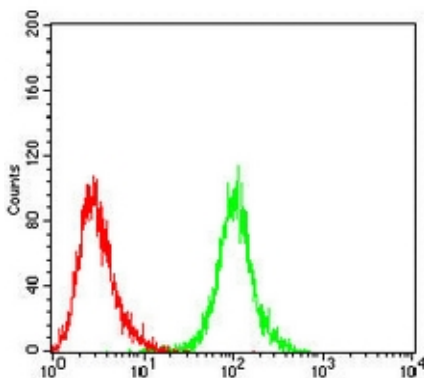
Images



Western blot analysis of NEDD9 expression in MCF7 (A), Hela (B), C2C12 (C), HEK293 (D) whole cell lysates. (Predicted band size: 93 kD; Observed band size: 100 kD)



Immunofluorescent analysis of NEDD9 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HepG2 cells using Anti-NEDD9 Antibody (green) and negative control (red).