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Anti-HEF1 Picoband Antibody

Catalog # ABO11980

Product Information

Application	WB
Primary Accession	Q14511
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Enhancer of filamentation 1(NEDD9) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	92861
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cytoplasm, cell cortex. Nucleus. Golgi apparatus. Cell projection, lamellipodium. Cytoplasm. Cell junction, focal adhesion. Localizes to both the cell nucleus and the cell periphery and is differently localized in fibroblasts and epithelial cells. In fibroblasts is predominantly nuclear and in some cells is present in the Golgi apparatus. In epithelial cells localized predominantly in the cell periphery with particular concentration in lamellipodia but is also found in the nucleus. Isoforms p105 and p115 are predominantly cytoplasmic and associate with focal adhesions while p55 associates with mitotic spindle.
Tissue Specificity	Widely expressed. Higher levels detected in kidney, lung, and placenta. Also detected in T-cells, B-cells and diverse cell lines. The protein has been detected in lymphocytes, in diverse cell lines, and in lung tissues.
Source	Eukaryota
Protein Name	Enhancer of filamentation 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen	E.coli-derived human HEF1 recombinant protein (Position: K273-E421). Human HEF1 shares 83% amino acid (aa) sequence identity with mouse HEF1.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the CAS family.

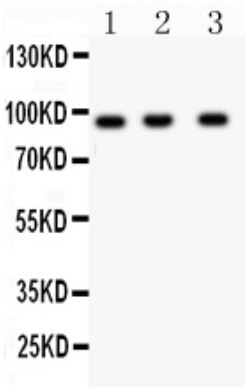
Protein Information

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

Enhancer of filamentation 1 (EF1), also known as NEDD-9, is a protein that in humans is encoded by the NEDD9 gene. The protein encoded by this gene is a member of the CRK-associated substrates family. Members of this family are adhesion docking molecules that mediate protein-protein interactions for signal transduction pathways. It is mapped to 6p24.2. This protein is a focal adhesion protein that acts as a scaffold to regulate signaling complexes important in cell attachment, migration and invasion as well as apoptosis and the cell cycle. This protein has also been reported to have a role in cancer metastasis. NEDD9 is also a highly relevant cancer gene that governs metastatic potential in human melanoma. What □€™s more, it has been speculated that NEDD9 may be an important linking element between extracellular signaling and regulation of the cytoskeleton.

Images



Anti- HEF1 Picoband antibody, ABO11980, Western blottingAll lanes: Anti HEF1 (ABO11980) at 0.5ug/mlLane 1: JURKAT Whole Cell Lysate at 40ugLane 2: CEM Whole Cell Lysate at 40ugLane 3: RAJI Whole Cell Lysate at 40ugPredicted bind size: 93KDObserved bind size: 93KD

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