

KD-Validated Anti-NEDD9 Mouse Monoclonal Antibody

Mouse monoclonal antibody Catalog # AGI2222

Specification

Gene Name

KD-Validated Anti-NEDD9 Mouse Monoclonal Antibody - Product Information

Application WB, FC Primary Accession Q14511

Reactivity
Clonality
Monoclonal
Isotype
Mouse IgG2a

Calculated MW Predicted, 93 kDa; observed, 93-115 kDa

KDa NEDD9

Aliases

NEDD9; Neural Precursor Cell Expressed,
Developmentally Down-Regulated 9; CAS-L;

CASS2; HEF1; Cas Scaffolding Protein Family Member 2; Neural Precursor Cell

Expressed Developmentally Down-Regulated Protein 9; Renal

Carcinoma Antigen NY-REN-12; Enhancer Of Filamentation 1; CASL; Crk-Associated

Substrate Related Protein Cas-L;

CRK-Associated Substrate-Related Protein;

Enhancer Of Filamentation 1 P55; P130Cas-Related Protein; Cas-Like Docking; Cas-Like; NEDD-9; CAS2; CasL;

P105

Immunogen Recombinant protein of human NEDD9

KD-Validated Anti-NEDD9 Mouse Monoclonal Antibody - 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 {ECO:0000312|HGNC:HGNC:7733}, CASS2 {ECO:0000312|HGNC:HGNC:7733}, Neural precursor cell expressed developmentally down-regulated protein 9 {ECO:0000312|HGNC:HGNC:7733}, NEDD-9 {ECO:0000312|HGNC:HGNC:7733}, Renal carcinoma antigen NY-REN-12, p105, Enhancer of filamentation 1 p55, NEDD9 (<a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=7733"

href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=7733" target=" blank">HGNC:7733)

KD-Validated Anti-NEDD9 Mouse Monoclonal Antibody - 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)

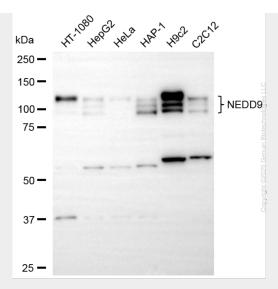
KD-Validated Anti-NEDD9 Mouse Monoclonal Antibody - Protocols

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

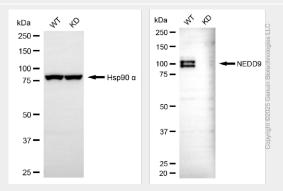
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-NEDD9 Mouse Monoclonal Antibody - Images

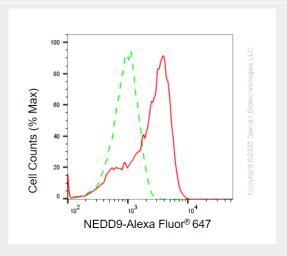




Western blotting analysis using anti-NEDD9 antibody (Cat#65269). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NEDD9 antibody (Cat#65269, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-NEDD9 antibody (Cat#65269). NEDD9 expression in wild-type (WT) and NEDD9 knockdown (KD) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-NEDD9 antibody (Cat#65269, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of NEDD9 expression in H9c2 cells using anti-NEDD9 antibody





(Cat#65269, 1:2,000). Green, isotype control; red, NEDD9.