

NEDD8 Rabbit mAb

Catalog # AP74953

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	Q15843
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	9072

Additional Information

Gene ID	4738
Other Names	NEDD8
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A FC~~1:200-1:500 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	NEDD8 {ECO:0000303 PubMed:9694792, ECO:0000312 HGNC:HGNC:7732}
Function	Ubiquitin-like protein which plays an important role in cell cycle control and embryogenesis via its conjugation to a limited number of cellular proteins, such as cullins or p53/TP53 (PubMed: 10318914 , PubMed: 10597293 , PubMed: 11953428 , PubMed: 14690597 , PubMed: 15242646 , PubMed: 9694792 , PubMed: 38605244 , PubMed: 38316879). Attachment of NEDD8 to cullins is critical for the recruitment of E2 to the cullin-RING- based E3 ubiquitin-protein ligase complex, thus facilitating polyubiquitination and proteasomal degradation of cyclins and other regulatory proteins (PubMed: 10318914 , PubMed: 10597293 , PubMed: 11953428 , PubMed: 20688984 , PubMed: 9694792 , PubMed: 38605244 , PubMed: 38316879). Attachment of NEDD8 to p53/TP53 inhibits p53/TP53 transcriptional activity (PubMed: 15242646). Covalent attachment to its substrates requires prior activation by the E1 complex UBE1C-APPBP1 and linkage to the E2 enzyme UBE2M (PubMed: 14690597).

Cellular Location

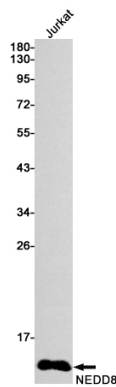
Nucleus. Note=Mainly nuclear.

Tissue Location

Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis, ovary, colon and leukocytes

Background

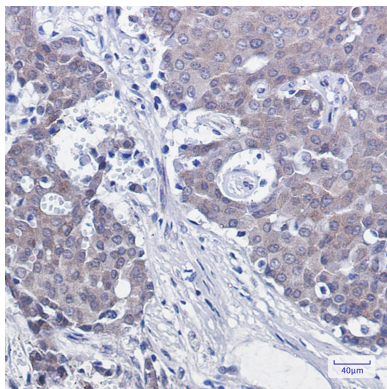
Neural precursor cell-expressed developmentally downregulated protein 8 (NEDD8), also known as Rub1 (related to ubiquitin 1) in plants and yeast, is a member of the ubiquitin-like protein family. The covalent attachment of NEDD8 to target proteins, termed neddylation, is a reversible, multi-step process analogous to ubiquitination.

Images

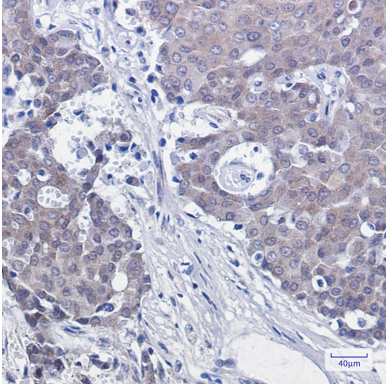
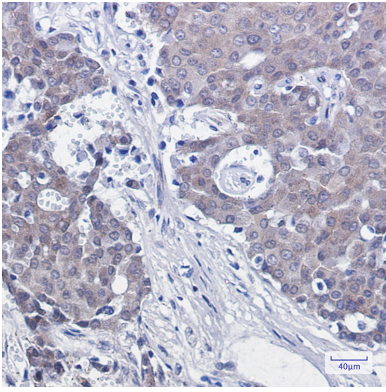
Western blot analysis of NEDD8 in Jurkat lysates using NEDD8 antibody.



Immunocytochemistry analysis of NEDD8(green) in HeLa using NEDD8 antibody, and DAPI(blue)



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using NEDD8 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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