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Anti-NEDD8 Picoband Antibody

Catalog # ABO10090

Product Information

Application	WB, IHC-P
Primary Accession	Q15843
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for NEDD8(NEDD8) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4738
Other Names	NEDD8, Neddylin, Neural precursor cell expressed developmentally down-regulated protein 8, NEDD-8, Ubiquitin-like protein Nedd8, NEDD8
Calculated MW	9072
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus . Mainly nuclear.
Tissue Specificity	Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis, ovary, colon and leukocytes. .
Source	Eukaryota
Protein Name	NEDD8
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human NEDD8 (20-60aa TDKVERIKERVEEKEGIPPQQQRLIYSGKQMNDEKTAADYK), identical to the related mouse and rat sequences.
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.

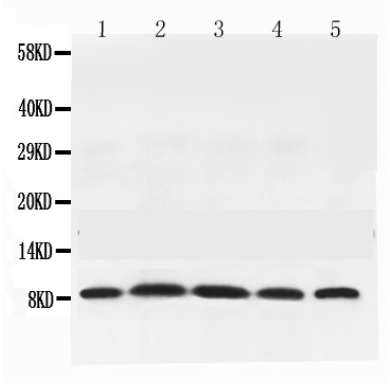
Protein Information

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). Neddylates EGFR resulting in protein stabilization and translocation to the cell membrane (PubMed:28891468).
Cellular Location	Nucleus. Note=Mainly nuclear.
Tissue Location	Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis, ovary, colon and leukocytes

Background

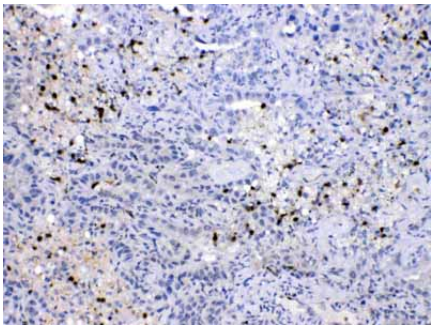
NEDD8 is a protein that in humans is encoded by the NEDD8 gene. Human NEDD8 shares 60% amino acid sequence identity to ubiquitin. The most substrates of NEDD8 modification are the Cullin subunits of Cullin-based E3 ubiquitin ligases, which are active only when neddylated. Their NEDDylation is critical for the recruitment of E2 to the ligase complex, thus facilitating ubiquitin conjugation. NEDD8 modification has therefore been implicated in cell cycle progression and cytoskeletal regulation.

Images



Western blot analysis of NEDD8 expression in rat testis extract (lane 1), mouse thymus extract (lane 2), mouse brain extract (lane 3), HELA whole cell lysates (lane 4) and MCF-7 whole cell lysates (lane 5). NEDD8 at 9KD was detected using rabbit anti- NEDD8 Antigen Affinity purified polyclonal antibody (Catalog #ABO10090) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

NEDD8 was detected in paraffin-embedded sections of



human lung cancer tissues using rabbit anti- NEDD8 Antigen Affinity purified polyclonal antibody (Catalog # ABO10090) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .

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