

NEDD8 Antibody

Rabbit mAb Catalog # AP91053

Product Information

Application WB, IHC, IF, ICC, IP, IHF

Primary Accession <u>Q15843</u>

Reactivity Rat, Human, Mouse

Clonality Monoclonal Other Names NEDD8; Nedd-8;

IsotypeRabbit IgGHostRabbitCalculated MW9072

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:20

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human NEDD8

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name NEDD8 {ECO:0000303|PubMed:9694792, ECO:0000312|HGNC:HGNC:7732}

FunctionUbiquitin-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:<u>11953428</u>, PubMed:<u>14690597</u>, PubMed:<u>15242646</u>, PubMed:<u>9694792</u>, PubMed:<u>38605244</u>, PubMed:<u>38316879</u>). 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:<u>20688984</u>, PubMed:<u>9694792</u>, PubMed:<u>38605244</u>,

PubMed:<u>38316879</u>). Attachment of NEDD8 to p53/TP53 inhibits p53/TP53 transcriptional activity (PubMed:<u>15242646</u>). 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

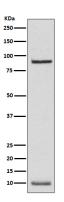
Nucleus. Note=Mainly nuclear.

Tissue Location

Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis,

ovary, colon and leukocytes

Images



Western blot analysis of NEDD8 expression in K562 cell lysate.

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