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NEDD8 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1664a

Specification

NEDD8 Antibody - Product Information

Application	**E, WB, IHC, IF, FC**
Primary Accession	Q15843
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**9kDa KDa**

Description
Ubiquitin-like protein which plays an important role in cell cycle control and embryogenesis. Covalent attachment to its substrates requires prior activation by the E1 complex UBE1C-APPBP1 and linkage to the E2 enzyme UBE2M. Attachment of NEDD8 to cullins activates their associated E3 ubiquitin ligase activity, and thus promotes polyubiquitination and proteasomal degradation of cyclins and other regulatory proteins.Tissue specificity: Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis, ovary, colon and leukocytes.

Immunogen
Purified recombinant fragment of human NEDD8 expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

NEDD8 Antibody - 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

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/500 - 1/2000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NEDD8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NEDD8 Antibody - 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:9694792, PubMed:10318914, PubMed:10597293, PubMed:11953428, PubMed:15242646, PubMed:14690597). 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:9694792, PubMed:10318914, PubMed:10597293, PubMed:11953428, PubMed:20688984). 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.

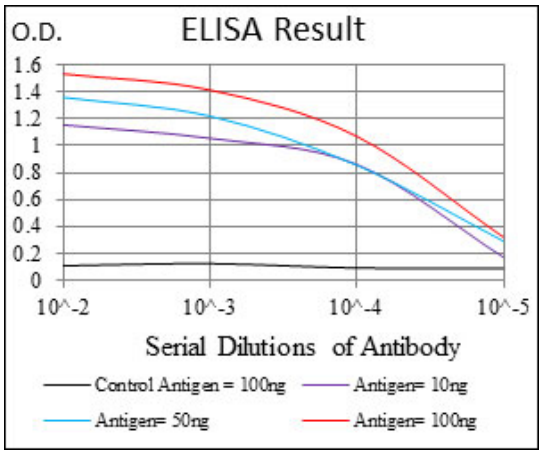
Tissue Location
Highly expressed in heart, skeletal muscle, spleen, thymus, prostate, testis, ovary, colon and leukocytes

NEDD8 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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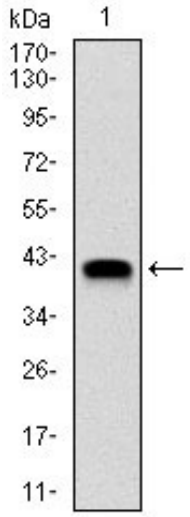


Figure 1: Western blot analysis using NEDD8 mAb against human NEDD8 (AA: 1-81) recombinant protein. (Expected MW is 40 kDa)

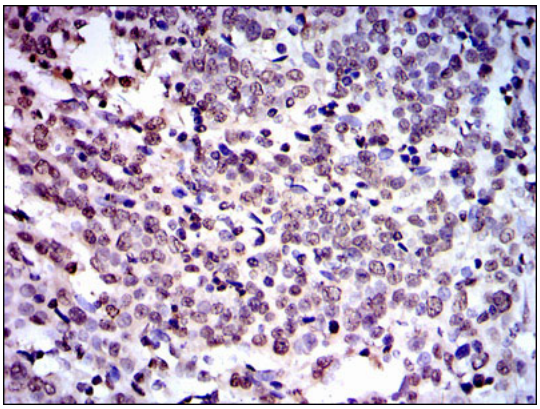


Figure 2: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using NEDD8 mouse mAb with DAB staining.

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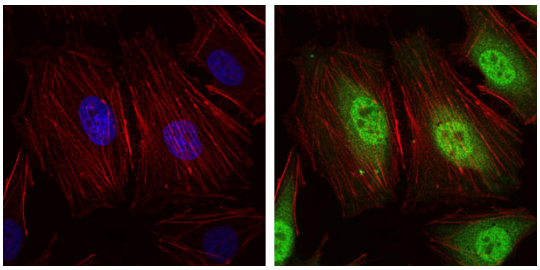


Figure 3: Immunofluorescence analysis of Hela cells using NEDD8 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

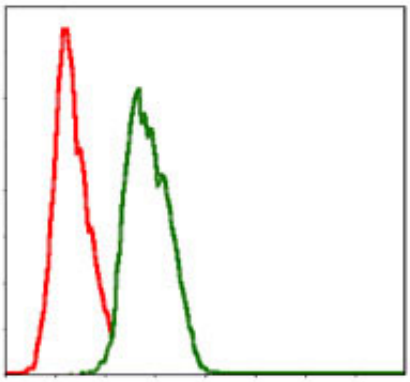


Figure 4: Flow cytometric analysis of Hela cells using NEDD8 mouse mAb (green) and negative control (red).

NEDD8 Antibody - References

1. Cell. 2009 Jul 23;138(2):389-403. 2. Biochem Biophys Res Commun. 2009 Apr 10;381(3):443-7.