

Rabbit Anti-NEDD8 antibody

SL3812R

Product Name:	NEDD8
Chinese Name:	Ubiquitin样蛋白NEDD8抗体
Alias:	NED8; NEDD 8; Neddylin; Neural precursor cell expressed developmentally down regulated 8; Neural precursor cell expressed developmentally down regulated gene 8; Rub1; Ubiquitin like protein Nedd 8; Ubiquitin like protein Nedd8.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	8.5kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NEDD8:31-81/81
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Ubiquitin like proteins fall into two classes: the first class, ubiquitin-like modifiers (UBLs) function as modifiers in a manner analogous to that of ubiquitin. Examples of UBLs are SUMO, Rub1 (also called Nedd8), Apg12 and Hub1. Proteins of the second class include Parkin, RAD23 and DSK2, are designated ubiquitin domain proteins (UDPs). These proteins contain domains that are related to ubiquitin but are otherwise

unrelated to each other. In contrast to UBLs, UDPs are not proteolytically processed or conjugated to other proteins. Rub1 and the corresponding human homolog NEDD8 are activated by the E1 ubiquitin activating enzyme UBA2, that forms isopeptide linkages between thio esters. NEDD8 shows 80% homology to ubiquitin. The best known targets of Rub1 modification are members of the cullin family. Cullins are subunits of an E3 ubiquitin ligase complex called the Skp1 /Cul1/Cdc53 F box (SCF). The SCF promotes transfer of ubiquitin from a ubiquitin conjugating enzyme (E2) to the target protein. Rub1 modification may regulate SCF function or localization.

Function:

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.

Subunit:

Directly interacts with NUB1 and AHR. Covalently attached to cullins and p53.

Subcellular Location:

Nucleus. Note=Mainly nuclear.

Tissue Specificity:

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

Post-translational modifications:

Cleavage of precursor form by UCHL3 or SENP8 is necessary for function.

Similarity:

Belongs to the ubiquitin family.

SWISS:

Q15843

Gene ID:

4738

Database links:

Entrez Gene: 35151Fruit fly (Drosophila melanogaster)

Entrez Gene: 4738Human

Entrez Gene: 18002Mouse

Entrez Gene: 25490Rat

Entrez Gene: 368667Zebrafish

Omim: 603171Human

SwissProt: Q9VJ33Fruit fly (Drosophila melanogaster)

SwissProt: Q15843Human

SwissProt: P29595Mouse

SwissProt: Q71UE8Rat

<u>Unigene: 30848</u>Fruit fly (Drosophila melanogaster)

<u>Unigene: 531064</u>Human <u>Unigene: 296566</u>Mouse

Unigene: 216415Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.