

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human NEDD4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) NEDD8 or rhNEDD9 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 683211
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NEDD4 Asn211-Gly349 (predicted) Accession # NP_006145
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

NEDD4 (Neural precursor cell-expressed developmentally down-regulated gene 4-1; also RPF1) is a 115-120 kDa member of the HECT E3 ubiquitin ligase family of proteins. The NEDD4 gene is widely expressed, and serves as a complement to a related gene product termed NEDD4-2/NEDD4L. Both molecules ubiquitinate multiple proteins. NEDD4-1 acts preferentially on PTEN, tumor suppressors and endocytic proteins, while NEDD4-2 acts preferentially on membrane transporters. Human NEDD4-1 is 900 amino acids (aa) in length. It contains one PKC region (aa 20-124), four WW domains (aa 196-505) and one E3 HECT domain (aa 543-897). Caspase cleavage after Asp197 generates a 95 kDa C-terminal, and smaller but variable sized N-terminal fragment. There are multiple splice forms. Two show a 516 aa substitution for aa 1-169 and 1-97, respectively, while a third shows the latter substitution coupled to a deletion of aa 170-185. Over aa 211-349, human NEDD4-1 shares 83% aa identity to mouse NEDD4-1 and less than 25% aa identity with human NEDD4-2.

PRODUCT SPECIFIC NOTICES

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