

**DESCRIPTION**

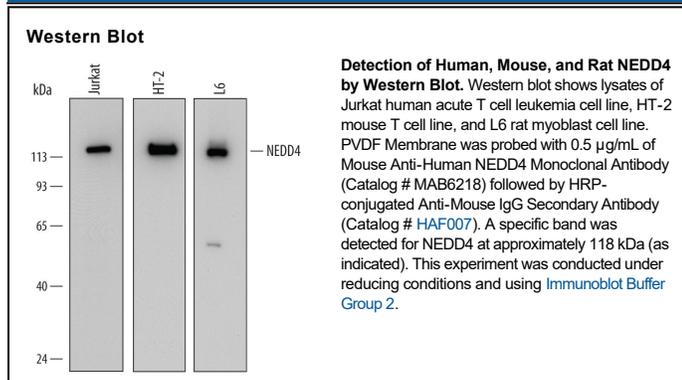
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human NEDD4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) NEDD8 or rhNEDD9 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 683211
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human NEDD4 Asn211-Gly349 (predicted) Accession # NP_006145
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.