

## DESCRIPTION

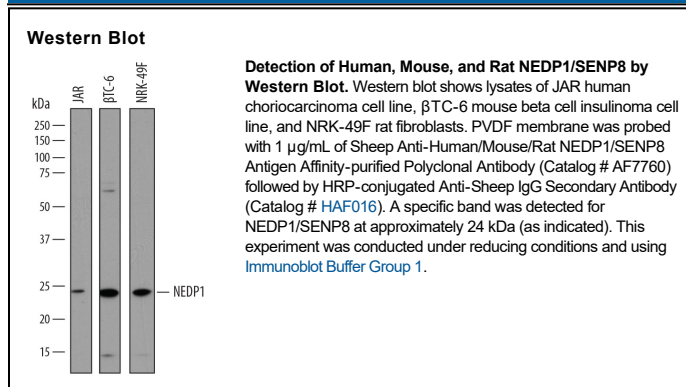
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, rat NEDP1/SEN8 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human NEDP1/SEN8 Met1-Lys212 (Thr207Ala) Accession # Q96LD8
<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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 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

NEDP1 (NEDD8-specific protease 1; also DEN1/Deneddylase-1 Protease, cysteine 2 and SENP8/Sentrin-specific protease 8) is a 24-26 kDa cytoplasmic cysteine protease that belongs to the Ulp/peptidase C48 family of enzymes. It is widely expressed, and is involved in NEDD8-associated ubiquitination. NEDD8 is a 9 kDa polypeptide that covalently binds to, and activates cullin-1, a molecule associated with a ubiquitin ligase complex. NEDD8-activated cullin promotes the transfer of ubiquitin to a limited number of target substrates involved in the cell cycle. This has the effect of controlling the levels of cell cycle regulators within the cell. NEDP1 influences these activities in two ways; first, it converts preNEDD8 into its mature form, and second, it deconjugates NEDD8 from its bound substrates. Human NEDP1 is 212 amino acids (aa) in length. It possesses an acetylated initiating methionine plus a protease domain that spans aa 11-174. Over an equivalent sequence, full-length human NEDP1 shares 92% aa sequence identity with mouse NEDP1. The mouse NEDP1 molecule contains a nine aa extension at the C-terminus not shared by the human molecule.