
MATERIAL DATA SHEET

Recombinant Human His6 NEDP1/SEN8**Cat. # E-800**

NEDD8-specific Protease 1 (NEDP1), also known as SUMO/Sentrin Specific Peptidase Family Member 8 (SEN8), DEN1, PRSC2, and FKSG8, is a cytoplasmic cysteine protease that belongs to the ULP/peptidase C48 family of deubiquitinating enzymes (1). It is widely expressed with the highest levels being observed in kidney and pancreas (2). NEDP1/SEN8 is 212 amino acids (aa) in length with a predicted molecular weight of 24.1 kDa (1). It possesses an acetylated initiating methionine plus a protease domain that spans aa 11-174. Human NEDP1/SEN8 shares 92% aa sequence identity with the mouse and rat orthologs. NEDP1/SEN8 is involved in NEDD8-associated ubiquitination (1,2,3-5). NEDD8 is a small Ubiquitin-like protein that covalently binds to target molecules, including Cullin 1 and p53 (6-8). It is a critical regulator of cell proliferation and development (3). NEDP1/SEN8 influences the NEDDylation of proteins by converting pro-NEDD8 into its mature form and deconjugating NEDD8 from its bound substrates (2,3-5,9).

Product Information

Quantity:	50 µg
MW:	27 kDa
Source:	<i>E. coli</i> -derived Contains a 6-His tag Accession # NP_660205
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 7.5, 100 mM NaCl, 10% Glycerol (v/v), 2 mM TCEP
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use: Recombinant Human His6-NEDP1/SEN8 is a NEDD8-specific deconjugating enzyme. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human His6-NEDP1/SEN8 concentration of 50-500 nM. A 15 minute pre-incubation with 10 mM DTT is recommended to achieve maximum activity.

Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -70 °C as supplied.
- 3 months, -70 °C under sterile conditions after opening.

Literature

References:

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