Recombinant NEDD8 protein (His tag)

Catalog Number	540360
Synonyms	Neddylin; Neural precursor cell expressed developmentally down-regulated protein 8; NEDD-8
Species	Human
Expression System	E. coli
Accession	Q15843
Molecular Weight	Predictes a molecular mass of 10.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1-76
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-76 aa (Q15843) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human NEDD8 (Neddylin) Fragment (1-76) is a high-purity, stable protein fragment designed for structural and biochemical studies. This ubiquitin-like protein plays a critical role in cell cycle regulation and embryogenesis, and the selected fragment offers optimal solubility and functionality for research applications. NEDD8 is a ubiquitin-like protein essential for cell cycle control and embryogenesis through its conjugation to specific cellular proteins such as cullins and p53/TP53. It facilitates the recruitment of E2 enzymes to cullin-RING E3 ubiquitin ligase complexes, enabling polyubiquitination and proteasomal degradation of regulatory proteins like cyclins. Additionally, NEDD8 conjugation to p53/TP53 inhibits its transcriptional activity. Activation and covalent attachment to substrates require the E1 complex UBE1C-APPBP1 and the E2 enzyme UBE2M. NEDD8 is primarily localized in the nucleus, underscoring its role in nuclear regulatory processes.