

Recombinant Human N4BP1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50691

Size: 10ug, 100ug

Protein Name: NEDD4-binding protein 1 (N4BP1) (EC 3.1.-.-)

Synonym: N4BP1, KIAA0615

UniProt ID: O75113

UniProt Link: www.uniprot.org/uniprotkb/O75113/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 896 AA

Molecular Weight: 100 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAARAVLDEFTAPAEKAELLEQSRGRIEGLFGVSLAVLGALGAEELPARIWLQLCGAQEAVHSAKE
YKIGICEPELEERECYPKDMHCIFVGAESLFLKSLIQDTCADLCILDIGLLGIRGSAEAVVMARSHIQQF
VKLFENKENLPSSQKESEVKREFKQFVEAHADNYTMDLLILPTSLKKELLTLTQGEENLFETGDDEVI
EMRDSQQTEFTQNAATGLNISRDETVLQEEARNKAGTPVSELTQQMDTVLSSSPDVLFDPIINGLTPD
EEALSNERICQKRRFSDSEERHTKKQFSLENVQEGEILHDAKTLAGNVIADLSDSSADSENLSPDIKE
TTEEMEYNILVNFFKTMGYSQEIVEKVIKVGYPSTEPLLLLEEIEKENKRFQEDREFSAGTVYPETNKT
KNKGVYSSTNELTTDSTPKKTAHTQQNMVEKFSQLPFKVEAKPCTSNCRINTFRTVPIEQKHEVW
GSNQNYICNTDPETDGLSPSVASPSPEVNFVSRGASSHQPRVPLFPENGLHQQPEPLLPNNMKSA
CEKRLGCCSSPHSKPNCSTLSPPMPLPQLLPSVTDARSAGPSDHIDSSVTGVQRFRTDLKIPYKLEL
KNEPGRTDLKHIVIDGSNVAITHGLKKFFSCRGIAIAVEYFWKLGNRNITVFVPQWRTRRDPNVTEQH
FLTQLQELGILSLTPARMVFGERIASHDDRFLHLADKTGGIIVTNDNFREFVNESVSWREITKRLQY
TFVGDIFMVPDDPLGRSGPRLEEFLQKEVCLRDMQPLLSALPNVGMFDPSFRVPGTQAASTSHQPP
TRIQGAPSSHWLPQQPHFPLLPALPSLQQNLPMQAQRSSAETNELREALLKIFPDSEQRLKIDQILVA
HPYMKDLNALSAMVLD

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant NEDD4-binding protein 1 (N4BP1) (EC 3.1.-.-) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Potent suppressor of cytokine production that acts as a regulator of innate immune signaling and inflammation. Acts as a key negative regulator of select cytokine and chemokine responses elicited by TRIF-independent Toll-like receptors (TLRs), thereby limiting inflammatory cytokine responses to minor insults. In response to more threatening pathogens, cleaved by CASP8 downstream of TLR3 or TLR4, leading to its inactivation, thereby allowing production of inflammatory cytokines (By similarity). Acts as a restriction factor against some viruses, such as HIV-1: restricts HIV-1 replication by binding to HIV-1 mRNAs and mediating their degradation via its ribonuclease activity (PubMed:31133753). Also acts as an inhibitor of the E3 ubiquitin-protein ligase ITCH: acts by interacting with the second WW domain of ITCH, leading to compete with ITCH's substrates and impairing ubiquitination of substrates (By similarity).

Subcellular Localization: Cytoplasm, cytosol . Nucleus . Nucleus, nucleolus . Nucleus, PML body . Note=Primarily localizes to the nucleolus. Also localizes to the PML nuclear bodies, when desumoylated.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.