

Recombinant Mouse N4BP1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51687

Size: 10ug, 100ug

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

Synonym: N4bp1, Kiaa0615

UniProt ID: Q6A037

UniProt Link: www.uniprot.org/uniprotkb/Q6A037/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 893 AA

Molecular Weight: 99 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAARVVLDEFTAPA EKAALLERSRGRIEALFGVGLAVLGALGAEEPLPARIWLQLRGAQEAVHSAKE
YIKGICEPELEEKECYPKAMHCIFVGAQSLFLKSLIQDTCADLCVLDTGLLGIRGSAEAVVMARSHIQQ
FVKLFESNENLPSNQRESEIKREFRQFVEAHADSYTMDLLILPTSLKKELLSLTQGEESLFETDDDVIT
VG D V R P P E Y T Q S A A T G P S S A R D E V V V Q E D S R N K A R T P V S E L T K H M D T V F S S S P D V L F V P V N G L S P D
E D A L S K D R V C H K R R S S D T E E R H T K K Q F S L E N V P E G E L L P D G K G S A G N E I D L S D P A S N S T N L S P D G
K D T T E E M E Y N I L V N F F K T M G Y S Q E I V E K V I R E Y G P S T E P L L L L E E I E K E N K R L Q E D R D F P P C T V Y P D A S
Q S R N A G V G S T T N E L T A D S T P K K A Q S H T E Q S M V E R F S Q L P F K D S K H C T S N C K V N S F R T V P V G Q K Q E I
W G S K Q N S S C T V D L E T D G H S A S A S A S P K D I S F V S R G A S G H Q Q R N P A F P E N G F Q Q Q T E P L L P N N T K
P A C E K R S G S C S S P Q P K P N Y P P L S P P L P L P Q L L P S V T E A R L G G S S D H I D S S V T G V Q R F R D T L K I P Y K L
E L K N E P G R A D L K H I V I D G S N V A I T H G L K K F F S C R G I A I A V E Y F W K L G N R N I T V F V P Q W R T R R D P N I T E Q
H F L T Q L Q E L G I L S L T P A R M V F G E R I A S H D D R F L L H L A D K T G G I I V T N D N F R E F V T E S V S W R E I I T K R L L Q
Y T F V G D I F M V P D D P L G R N G P R L E E F L R K E A F L R H M Q P L L N A L P S V G T F D P G F R S P S T Q V A N N S H Q P
P P R I Q T S S S P W L P Q Q S H F T A L A T L P S M Q Q N P P L P A Q R S S A E T S E L R E A L L K I F P D S E Q K L K I D Q I L A A
H P Y M K D L N A L S A L V L D

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 (PubMed:32971525). 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 (PubMed:32971525). In response to more threatening pathogens, cleaved by CASP8 downstream of TLR3 or TLR4, leading to its inactivation, thereby allowing production of inflammatory cytokines (PubMed:32971525). Acts as a restriction factor against some viruses: restricts viral replication by binding to mRNA viruses and mediating their degradation via its ribonuclease activity (By similarity). 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 (PubMed:17592138).

Subcellular Localization: Cytoplasm, cytosol . Nucleus . Nucleus, nucleolus . Nucleus, PML body . Note=Primarily localizes to the nucleolus (PubMed:20233849). Also localizes to the PML nuclear bodies, when desumoylated (PubMed:20233849).

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.