

Recombinant Mouse UBR1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51187

Size: 10ug, 100ug

Protein Name: E3 ubiquitin-protein ligase UBR1 (EC 2.3.2.27) (N-recogin-1) (Ubiquitin-protein ligase E3-alpha-1) (Ubiquitin-protein ligase E3-alpha-I)

Synonym: Ubr1

UniProt ID: O70481

UniProt Link: www.uniprot.org/uniprotkb/O70481/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1757 AA

Molecular Weight: 200 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MADEEMDGAERMDVSPEPPLAPQRPASWWDQQVDFYTAFLHHLAQLVPEIYFAEMDPDLEKQEE
VQMSILTPLEWYLFGEDPDICLEKLKHSGAFQLCGKVKFSGGETTYSCRDCADPTCVLCMDCFQSSV
HKNHRYKMHTSTGGGFCDCGDTEAWKTGPFCVDHEPGRAGTTKESLHCPLNEEVIAQARRIFPSVI
KYIVEMTIWEEEEKELPPELQIREKNERYCYVLFNDEHHSYDHVIYSLQRALDCELAEAQLHTTAIDKEG
RRAVKAGVYATCQEAKEDIKSHSENVSQHPLHVEVLHVSVMMAHQKFALRLGSMNKMIMSYSDDFR
QIFCQACLVEEPGSENPCISRLMLWDAKLYKGARKILHELIFSSFFMEMEYKKLFAMEFVKYYKQLQ
KEYISDDHERSISITALSVQMLTVPTLARHLIEEQNVISVITETLLEVLPEYLDRNNKFNFGYSQDKLG
RVYAVICDLKYILISKPIWTERLRAQFLEGFRSFLKILTCMQGMEEIRRQVGQHIEVDPDWEAAIAIQ
MQLKNILLMFQEWCADEDLLLVAYKECHKAVMRCSTNFMSSTKTVVQLCGHSLETYSYKVSSEDLV
SIHLPLSRTLGLHVRLSRLGAISRLHEFVPFDGFQVEVLVEYPLRCLVLVAQVVAEMWRRNGLSLIS
QVFYYQDVKCREEMYDKDIIMLQIGASIMDPNKFLLLVLRQYELTDAFNKTISTKDQDLIKQYNTLIEE
MLQVLIYIVGERYVPGVGNVTREEVIMREITHLLCIEPMPHSAIARNLPENENNETGLENVINKVATFK
KPGVSGHGVYELKDESLKDFNMYFYHYSKTQHSKAEHMQKKRRKQENKDEALPPPPPEFCPAFS
KVVNLLSCDVMYILRTIFERAVIDMESNLWTEGMLQMAFHILALGLLEEKQQLQKAPEEEVAFDFYH
KASRLGSSAMNAQNIQMLLEKLKGIPQLESQKDMITWILQMFDTVKRLREKSCLVVATTSGLECVKS
EEITHDKEKAERKRKAEEAARLHRQKIMAQMSALQKNFIETHKLMYDNTSEVTGKEDSIMEEESTSAV
SEASRIALGPKRGPVATEKEVLTCLCQEEQEVKLENNAMVLSACVQKSTALTQHRGKPVVDHLGETL
DPLFMDPDLAHGTYTGSCGHVMHAVCWQKYFEAVQLSSQQRIHVDLFDLESGEYLCPLCKSLCNTV



IPIIPLQPQKINSENAEALAQLLTLARWIQTVLARISGYNIKHAKGEAPAVPVLFNQGMGDSTFEFHSIL
SFGVQSSVKYSNSIKEMVILFATTIYRIGLKVPPDELDPRVPMMTWSTCAFTIQAIENLLGDEGKPLFG
ALQNRQHNGLKALMQFAVAQRRTCPQVLIHKHLARLLSVILPNLQSENTPGLLSVDLFHVLVGAVLAF
PSLYWDDTVDLQPSPLSSSYNHLYLFHLITMAHMLQILLTTDTDLSSGPPLAEGEEDSEEARCASAFF
VEVSQHTDGLAGCGAPGWYWLWLSLRNGITPYLRCAALLFHILLGVAPPEELFANSAEGEFSA LCSYL
SLPTNLFLLFQEYWD TIRPLLQRWCGDPALLKSLKQKSAVVRYPRKRNSLIELPEDYSCLLNQASHFR
CPRSADDERKHPVLCLFCGAILCSQNICCQEIVNGEEVGACVFHALHCGAGVCIFLKIRECRVVLVEG
KARGCAYPAPYLDEYGETDPGLKRGNPLHLSRERYRKLHLVWQQHCIIIEIARSQETNQMLFGFNW
QLL

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 E3 ubiquitin-protein ligase UBR1 (EC 2.3.2.27) (N-recogin-1) (Ubiquitin-protein ligase E3-alpha-1) (Ubiquitin-protein ligase E3-alpha-I) 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: E3 ubiquitin-protein ligase which is a component of the N-end rule pathway (PubMed:11689692, PubMed:14585983, PubMed:16311597, PubMed:19008229). Recognizes and binds proteins bearing specific N-terminal residues (N-degrons) that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation (PubMed:11689692, PubMed:14585983, PubMed:16311597, PubMed:19008229). Recognizes both type-1 and type-2 N-degrons, containing positively charged amino acids (Arg, Lys and His) and bulky and hydrophobic amino acids, respectively (PubMed:19008229). Does not ubiquitinate proteins that are acetylated at the N-terminus (By similarity). In contrast, it strongly binds methylated N-degrons (By similarity). Binds leucine and is a negative regulator of the leucine-mTOR signaling pathway, thereby controlling cell growth (By similarity).

Subcellular Localization: Cytoplasm, cytosol .

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.