# Recombinant UBR4 protein (His tag)

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| **Catalog Number** | 545155 |
| **Synonyms** | 600 kDa retinoblastoma protein-associated factor; p600; N-recognin-4; Retinoblastoma-associated factor of 600 kDa; RBAF600 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q5T4S7 |
| **Molecular Weight** | Predictes a molecular mass of 22.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band. |

## Product Information

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| **Sequence Region** | 233-427 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >89%, 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 233-427 aa (Q5T4S7) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Human UBR4 (233-427) Fragment is a high-quality, stable protein product derived from the E3 ubiquitin-protein ligase UBR4. This 195-amino acid fragment is engineered for optimal solubility and structural integrity, making it an ideal tool for biochemical assays, structural studies, and investigations into ubiquitination pathways and protein quality control mechanisms.<br>The full-length UBR4 protein is a critical E3 ubiquitin-protein ligase involved in multiple protein quality control pathways in the cytoplasm. It functions in the N-end rule pathway by ubiquitinating proteins with specific destabilizing N-terminal residues, targeting them for degradation. UBR4 also plays roles in preventing protein aggregation through assembly of branched ubiquitin chains, mediates degradation of oxidized proteins via autophagy, and is a catalytic component of the SIFI complex that regulates mitochondrial stress response by ubiquitinating key signaling components. Additionally, it participates in membrane morphogenesis and cytoskeletal organization through interactions with clathrin. UBR4 primarily localizes to the cytoplasm and cytoskeleton, with some nuclear presence, and concentrates at leading edges of membrane structures involved in actin motility. The selected fragment (233-427) represents a stable, soluble region suitable for detailed functional and structural analysis. |