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UBR4 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56557

Specification

UBR4 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q5T4S7
Reactivity	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**573841**

UBR4 Polyclonal Antibody - Additional Information

Gene ID 23352

Other Names
E3 ubiquitin-protein ligase UBR4, 2.3.2.27, 600 kDa retinoblastoma protein-associated factor, N-recognin-4, RING-type E3 ubiquitin transferase UBR4, Retinoblastoma-associated factor of 600 kDa, RBAF600, p600, Zinc finger UBR1-type protein 1, UBR4, KIAA0462, KIAA1307, RBAF600, ZUBR1

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

UBR4 Polyclonal Antibody - Protein Information

Name UBR4 {ECO:0000303|PubMed:35032865, ECO:0000312|HGNC:HGNC:30313}

Function
E3 ubiquitin-protein ligase involved in different protein quality control pathways in the cytoplasm (PubMed:25582440, PubMed:29033132, PubMed:34893540, PubMed:37891180, PubMed:38030679, PubMed:38182926, PubMed:38297121). Component of the N-end rule pathway: ubiquitinates proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their degradation (PubMed:34893540, PubMed:37891180, PubMed:38030679). 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:38030679). Does not ubiquitinate proteins that are acetylated at the N-terminus (PubMed:37891180). Together with UBR5, part of a cytoplasm protein quality control pathway that prevents protein aggregation by catalyzing assembly of heterotypic 'Lys-11'-/'Lys-48'- linked branched ubiquitin chains on aggregated proteins, leading to substrate recognition by the segregase p97/VCP and degradation by the proteasome: UBR4 probably synthesizes mixed chains containing multiple linkages, while UBR5 is likely branching multiple 'Lys-48'-linked chains of substrates initially modified (PubMed:29033132). Together with KCMF1, part of a protein quality control pathway that catalyzes ubiquitination and degradation of proteins that have been oxidized in response to reactive oxygen species (ROS): recognizes proteins with an Arg-CysO3(H) degron at the N-terminus, and mediates assembly of heterotypic 'Lys-63'-/'Lys-27'-linked branched ubiquitin chains on oxidized proteins, leading to their degradation by autophagy (PubMed:34893540). Catalytic component of the SIFI complex, a multiprotein complex required to inhibit the mitochondrial stress response after a specific stress event has been resolved: ubiquitinates and degrades (1) components of the HRI-mediated signaling of the integrated stress response, such as DELE1 and EIF2AK1/HRI, as well as (2) unimported mitochondrial precursors (PubMed:38297121). Within the SIFI complex, UBR4 initiates ubiquitin chain that are further elongated or branched by KCMF1 (PubMed:38297121). Mediates ubiquitination of ACLY, leading to its subsequent degradation (PubMed:23932781). Together with clathrin, forms meshwork structures involved in membrane morphogenesis and cytoskeletal organization (PubMed:16214886).

Cellular Location
Cytoplasm. Cytoplasm, cytoskeleton. Nucleus {ECO:0000250|UniProtKB:A2AN08}. Note=Localizes to endosomes via its association with calcium-bound calmodulin (By similarity). Concentrates at the leading edge of membrane structures involved in actin motility (PubMed:16214886). {ECO:0000250|UniProtKB:A2AN08, ECO:0000269|PubMed:16214886}

UBR4 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

UBR4 Polyclonal Antibody - Images