

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	574 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human UBR4
Epitope Specificity	3001-3200/5183
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane Curated; Multi-pass membrane protein; Cytoplasm; cytoskeleton; Nucleus
SIMILARITY	Belongs to the UBR4 family.
SUBUNIT	Interacts with RB1 and calmodulin.
	Interacts with protein E7 from papilloma virus HPV-16, HPV-6B and HPV-11.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

The protein encoded by this gene is an E3 ubiquitin-protein ligase that interacts with the retinoblastoma-associated protein in the nucleus and with calcium-bound calmodulin in the cytoplasm. The encoded protein appears to be a cytoskeletal component in the cytoplasm and part of the chromatin scaffold in the nucleus. In addition, this protein is a target of the human papillomavirus type 16 E7 oncoprotein. [provided by RefSeq, Aug 2010]

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

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format

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

Storage

Store at -20 °C 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 °C.

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 Cytometry](#)
- [Cell Culture](#)

UBR4 Polyclonal Antibody - Images