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K48-linkage Specific Ubiquitin Antibody

Rabbit mAb
Catalog # AP90963

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P0CG47
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	FLJ25987; MGC8385; ubiquitin B; Ubiquitin; UBCEP1; UBCEP2; RPS27A;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	25762

Additional Information

Dilution	WB 1:100~1:500 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human K48-linkage Specific Ubiquitin
Description	Plays an important role in the ubiquitin-proteasome pathway. Ubiquitin can be covalently linked to many cellular proteins by the ubiquitination process, which targets proteins for degradation by the 26S proteasome. Three components are involved in the target protein-ubiquitin conjugation process. Ubiquitin is first activated by forming a thiolester complex with the activation component E1; the activated ubiquitin is subsequently transferred to the ubiquitin-carrier protein E2, then from E2 to ubiquitin ligase E3 for final delivery to the epsilon-NH2 of the target protein lysine residue.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

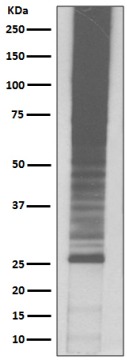
Name	UBB
Function	[Ubiquitin]: Exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin chains). Polyubiquitin chains, when attached to a target protein, have different functions depending on the Lys residue of the ubiquitin that is linked: Lys-6-linked may be involved in DNA repair; Lys-11-linked is involved in ERAD (endoplasmic reticulum-associated degradation) and in cell- cycle regulation; Lys-29-linked is involved in proteotoxic stress response and cell cycle; Lys-33-linked is involved in kinase modification; Lys-48-linked is

involved in protein degradation via the proteasome; Lys-63-linked is involved in endocytosis, DNA-damage responses as well as in signaling processes leading to activation of the transcription factor NF-kappa-B. Linear polymer chains formed via attachment by the initiator Met lead to cell signaling. Ubiquitin is usually conjugated to Lys residues of target proteins, however, in rare cases, conjugation to Cys or Ser residues has been observed. When polyubiquitin is free (unanchored-polyubiquitin), it also has distinct roles, such as in activation of protein kinases, and in signaling.

Cellular Location

[Ubiquitin]: Cytoplasm. Nucleus. Mitochondrion outer membrane; Peripheral membrane protein

Images



Western blot analysis of Ubiquitin expression in Jurkat cell lysate.

Image not found : 202311/AP90963-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human endometrium carcinoma, using K48-linkage Specific Ubiquitin Antibody.

Image not found : 202311/AP90963-IF.jpg

Immunofluorescent analysis of MCF-7 cells, using K48-linkage Specific Ubiquitin Antibody.