

### K48-linkage Specific Ubiquitin Antibody

Rabbit mAb Catalog # AP90963

#### **Specification**

### K48-linkage Specific Ubiquitin Antibody - Product Information

Application WB, FC, ICC
Primary Accession POCG47
Reactivity Rat
Clonality Monoclonal

**Other Names** 

FLJ25987; MGC8385; ubiquitin B; Ubiquitin; UBCEP1; UBCEP2; RPS27A;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 25762 Da

# K48-linkage Specific Ubiquitin Antibody - Additional Information

Dilution WB~~1:1000

FC~~1:10~50 ICC~~N/A

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.

#### K48-linkage Specific Ubiquitin Antibody - 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**

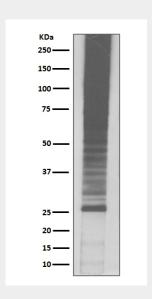
[Ubiquitin]: Cytoplasm. Nucleus. Mitochondrion outer membrane; Peripheral membrane protein

#### K48-linkage Specific Ubiquitin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

## K48-linkage Specific Ubiquitin Antibody - Images



Western blot analysis of Ubiquitin expression in Jurkat cell lysate.