

## Rabbit Anti-Ubiquitin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52106

### **Specification**

## Rabbit Anti-Ubiquitin Polyclonal Antibody - Product Information

Application WB, IHC-P
Primary Accession P0CG48
Reactivity Human, Mouse, Rat, Pig
Host Rabbit

Clonality Polyclonal Calculated MW 77039

# Rabbit Anti-Ubiquitin Polyclonal Antibody - Additional Information

**Gene ID 7316** 

**Other Names** 

HMG2; Polyubiquitin-C; UBC

### **Dilution**

<span class ="dilution\_WB">WB~~1:100~1:500</span><br \> <span class ="dilution\_IHC-P">IHC-P~~1:100~1:500</span>

#### **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.

# Rabbit Anti-Ubiquitin Polyclonal Antibody - Protein Information

# Name UBC

### **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





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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**

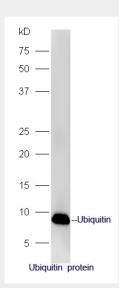
[Ubiquitin]: Cytoplasm. Nucleus. Mitochondrion outer membrane; Peripheral membrane protein

# Rabbit Anti-Ubiquitin Polyclonal Antibody - Protocols

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

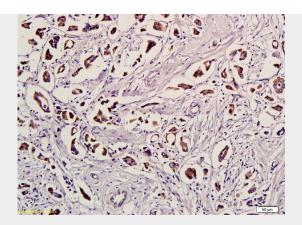
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Rabbit Anti-Ubiquitin Polyclonal Antibody - Images



Ubiquitin protein probed with Rabbit Anti-Ubiquitin Polyclonal Antibody, Unconjugated (AP52106) at 1:300 overnight at 4°C. Followed by a conjugated secondary antibody at 1:5000 for 90 min at 37°C.





Formalin-fixed and paraffin embedded human breast cancer labeled with Anti-Ubiquitin/UBC/UB Polyclonal Antibody, Unconjugated (AP52106) followed by conjugation to the secondary antibody and DAB staining

### Rabbit Anti-Ubiquitin Polyclonal Antibody - Background

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 lysosomal degradation; 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.