

Anti-Ubiquitin Antibody

Catalog # ABO10742

Specification

Anti-Ubiquitin Antibody - Product Information

ApplicationWB, IHCPrimary AccessionP0CG47HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Polyubiquitin-B(UBB) detection. Tested with WB, IHC-P inHuman; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Ubiquitin Antibody - Additional Information

Gene ID 7314

Other Names Polyubiquitin-B, Ubiquitin, UBB

Calculated MW 25762 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization Ubiquitin: Cytoplasm . Nucleus .

Protein Name Polyubiquitin-B

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Ubiquitin(29-45aa KIQDKEGIPPDQQRLIF), identical to the rat and mouse sequences.

Purification Immunogen affinity purified.

Cross Reactivity



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the ubiquitin family.

Anti-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

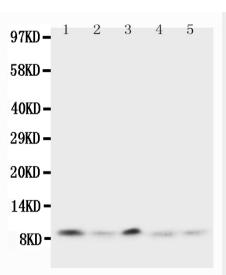
[Ubiquitin]: Cytoplasm. Nucleus. Mitochondrion outer membrane; Peripheral membrane protein

Anti-Ubiquitin Antibody - Protocols

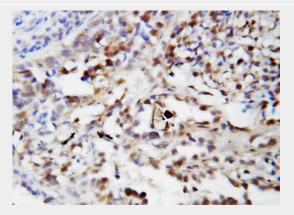
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Ubiquitin Antibody - Images



Anti-Ubiquitin antibody, ABO10742, Western blottingLane 1: Rat Thymus Tissue LysateLane 2: Human MCF-7 Cell LysateLane 3: MM231 Cell LysateLane 4: HELA Cell LysateLane 5: SMMC Cell Lysate



Anti-Ubiquitin antibody, ABO10742, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-Ubiquitin Antibody - Background

Ubiquitin(originally, ubiquitous immunopoietic polypeptide) is a small regulatory protein that has been found in almost all tissues(ubiquitously) of eukaryotic organisms. Its gene is mapped to 16p 13.3. The ubiquitin protein itself consists of 76 amino acids and has a molecular mass of about 8.5 kDa. Ubiquitin binds to proteins and labels them for destruction. It directs protein recycling and also direct proteins to other locations in the cell, where they control other protein and cell mechanisms.