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Anti-Ubiquitin Antibody

Catalog # ABO10742

Product Information

Application	WB, IHC-P
Primary Accession	P0CG47
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Polyubiquitin-B(UBB) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7314
Other Names	Polyubiquitin-B, Ubiquitin, UBB
Calculated MW	25762
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Ubiquitin: Cytoplasm . Nucleus .
Source	Eukaryota
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.

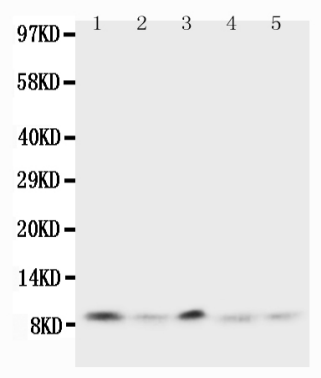
Protein Information

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

Background

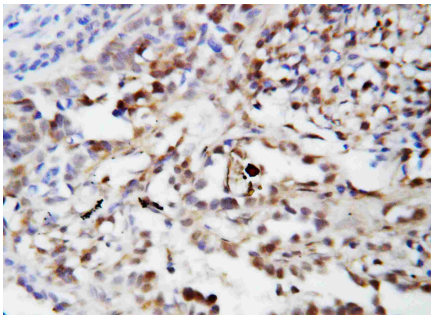
Ubiquitin(originally, ubiquitous immunopoietic polypeptide) is a small regulatory protein that has been found in almost all tissues(ubiquitously) of eukaryotic organisms. Its gene is mapped to 16p 13.3. The ubiquitin protein itself consists of 76 amino acids and has a molecular mass of about 8.5 kDa. 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.

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



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