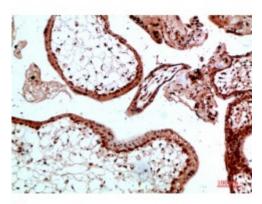


Anti-Ub antibody





Description Rabbit polyclonal to Ub.

Model STJ98816

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IHC

Immunogen Synthetic peptide from human Ub protein.

Immunogen Region 1-50 aa

Gene ID <u>7314</u>

Gene Symbol <u>UBB</u>

Dilution range IHC-P 1:50-300ELISA 1:5000-20000

Specificity The antibody detects endogenous Ub.

Purification The antibody was affinity-purified from rabbit serum by affinity-

chromatography using specific immunogen.

Note For Research Use Only (RUO).

Protein Name Polyubiquitin-B Ubiquitin

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50%

Glycerol.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:12463OMIM:191339</u>

Alternative Names Polyubiquitin-B Ubiquitin

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-6linked 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.

Cellular Localization Ubiquitin: Cytoplasm Nucleus

Post-translational Modifications Ubiquitin: Phosphorylated at Ser-65 by PINK1 during mitophagy. Phosphorylated ubiquitin specifically binds and activates parkin (PRKN), triggering mitophagy . Phosphorylation does not affect E1-mediated E2 charging of ubiquitin but affects discharging of E2 enzymes to form polyubiquitin chains. It also affects deubiquitination by deubiquitinase enzymes such as USP30 .

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