ARG54630
anti-Ubiquitin antibody

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Ubiquitin
Tested Reactivity	Hu, Ms, Rat, Bov, Chk, Dm, Dog, E. coli, Fsh, Gpig, Hm, Mk, Pig, Rb, S. cerevisiae, Sheep, Xenopus laevis, Yeast
Tested Application	ICC/IF, IE, IHC-Fr, IHC-P, IP, WB
Specificity	This antibody will identify free ubiquitin aswell as ubiquinated proteins on western blot.It recognizes human, monkey, mouse, rat,hamster, rabbit guinea pig, bovine, porcine,canine, sheep, chicken, Xenopus, yeast,Drosophila, and fish ubiquitin.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Ubiquitin
Species	Bovine
Immunogen	Native bovine ubiquitin conjugated to KLH.
Conjugation	Un-conjugated
Alternate Names	Polyubiquitin-B

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
IE	1:1000
IHC-Fr	1:200
IHC-P	Assay-dependent
IP	1:100
WB	1:1000 - 1:5000

Application Note	IHC-Fr: For PFA perfusion fixed frozen section. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Heat-shocked HeLa and Mouse brain

Properties

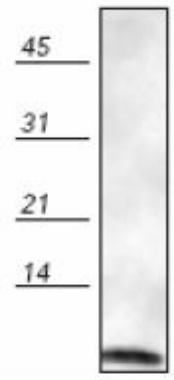
Form	Liquid
Purification	Protein A-purified antibody

Buffer	PBS (pH 7.2), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	UBB
Gene Full Name	ubiquitin B
Background	Ubiquitin is a highly-conserved, 76-aminoacid polypeptide expressed in all eukaryoticcells. Ubiquitination of proteins facilitatestargeting of cytosolic and nuclear proteinsfor degradation by proteasomes. Thisessential cellular process involves a multienzymecascade of ubiquitin-activatingenzymes (E1s), ubiquitin-conjugatingenzymes (E2s or Ubcs), and ubiquitinproteinligases (E3s). Ubiquitination alsoparticipates in internalization anddegradation of plasma membrane proteinssuch as T cell receptor subunits while stillassociated with membranes of theendoplasmic reticulum.
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 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. [UniProt]
Highlight	Related products: Ubiquitin antibodies; Ubiquitin ELISA Kits; Ubiquitin Duos / Panels; Anti-Rabbit IgG secondary antibodies;
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody; Neuroscience antibody
Calculated Mw	26 kDa
PTM	Ubiquitin: Phosphorylated at Ser-65 by PINK1 during mitophagy. Phosphorylated ubiquitin specifically binds and activates parkin (PRKN), triggering mitophagy (PubMed:24660806, PubMed:24751536, PubMed:24784582, PubMed:25527291). 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 (PubMed:25527291).

Images



ARG54630 anti-Ubiquitin antibody WB image

Western Blot: Heat-shocked HeLa cell lysate stained with ARG54630 anti-Ubiquitin antibody.