ARG40605
anti-Ubiquitin (linkage-specific K48) antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Ubiquitin (linkage-specific K48)
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Ubiquitin (linkage-specific K48)
Species	Human
Immunogen	Synthetic peptide derived from Human K48-linkage specific Ubiquitin.
Conjugation	Un-conjugated
Alternate Names	Epididymis secretory protein Li 50; FLJ25987; HEL S 50; MGC8385; Polyubiquitin B; RPS 27A; UBA 52; UBA 80; UBB; UBC; UBCEP1; UBCEP2; Ubiquitin; Ubiquitin B

Application Instructions

Application table

Application	Dilution
FACS	1:50
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:100 - 1:500

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

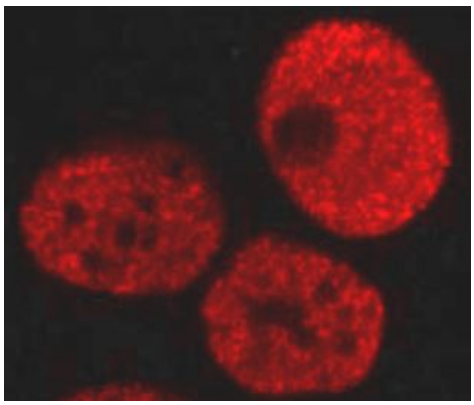
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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

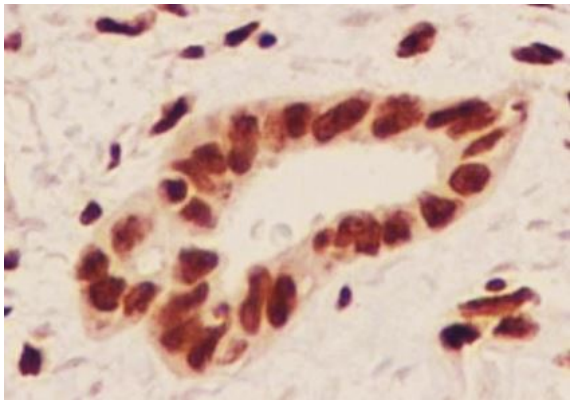
Gene Symbol	UBB
Gene Full Name	ubiquitin B
Background	This gene encodes ubiquitin, one of the most conserved proteins known. Ubiquitin has a major role in targeting cellular proteins for degradation by the 26S proteosome. It is also involved in the maintenance of chromatin structure, the regulation of gene expression, and the stress response. Ubiquitin is synthesized as a precursor protein consisting of either polyubiquitin chains or a single ubiquitin moiety fused to an unrelated protein. This gene consists of three direct repeats of the ubiquitin coding sequence with no spacer sequence. Consequently, the protein is expressed as a polyubiquitin precursor with a final amino acid after the last repeat. An aberrant form of this protein has been detected in patients with Alzheimer's disease and Down syndrome. Pseudogenes of this gene are located on chromosomes 1, 2, 13, and 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]
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 news: m6A reader YTHDF2 in mRNA decay and aggresome formation;
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). [UniProt]
Cellular Localization	Cytoplasm. Nucleus. [UniProt]

Images



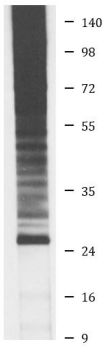
ARG40605 anti-Ubiquitin (linkage-specific K48) antibody ICC/IF image

Immunofluorescence: MCF7 cells stained with ARG40605 anti-Ubiquitin (linkage-specific K48) antibody.



ARG40605 anti-Ubiquitin (linkage-specific K48) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human endometrium carcinoma stained with ARG40605 anti-Ubiquitin (linkage-specific K48) antibody.



ARG40605 anti-Ubiquitin (linkage-specific K48) antibody WB image

Western blot: Analysis of Ubiquitin expression in Jurkat cell lysate, using ARG40605 anti-Ubiquitin (linkage-specific K48) antibody.