abcam

Product datasheet

Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free ab238442

Recombinant

RabMAb

6 Images

Overview

Product name Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free

Description Rabbit monoclonal [EPR17034] to Ubiquitin (linkage-specific K27) - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, Flow Cyt (Intra), IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human, Recombinant fragment

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Human transitional cell carcimona of the bladder tissue.

General notes ab238442 is the carrier-free version of **ab181537**.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR17034

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab238442 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 26 kDa. Actual Band: 14kDa and above.
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

Relevance

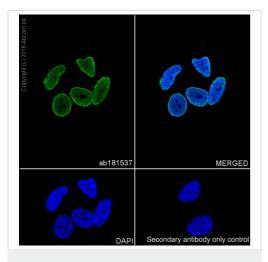
Function: Ubiquitin exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or 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. Similarity: Belongs to the ubiquitin family. Contains 3 ubiquitin-like domains.

Cellular localization

Cell Membrane, Cytoplasmic and Nuclear

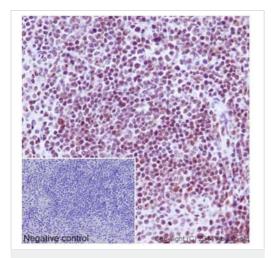
Images



Immunocytochemistry/ Immunofluorescence - Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free (ab238442)

Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labelling Ubiquitin (linkage-specific K27) with purified **ab181537** at 1/1000. Cells were fixed with 4% PFA and permeabilized with 0.1% triton X-100. **ab150077** Goat anti rabbit IgG (Alexa Fluor® 488) at 1/1000 was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181537).

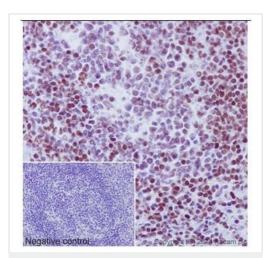


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free (ab238442)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling Ubiquitin (linkage-specific K27) with ab181537 at 1/500 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on lymphocytes of Mouse spleen is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181537).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

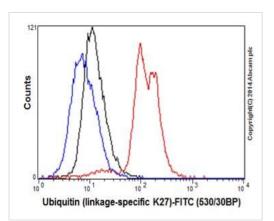


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free (ab238442)

Immunohistochemical analysis of paraffin-embedded Rat spleen tissue labeling Ubiquitin (linkage-specific K27) with <u>ab181537</u> at 1/500 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Nuclear staining on lymphocytes of Rat spleen is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181537).

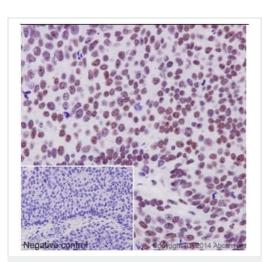
Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free (ab238442)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling Ubiquitin (linkage-specific K27) with **ab181537** at 1/160 dilution (red). The secondary antibody was Goat anti rabbit lgG (FITC) at 1/150 dilution. The isotype control is Rabbit monoclonal lgG (black) and cell without incubation with primary antibody and secondary antibody is blue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181537).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ubiquitin (linkage-specific K27) antibody [EPR17034] - BSA and Azide free (ab238442)

Immunohistochemical analysis of paraffin-embedded Human transitional cell carcinoma of bladder labeling Ubiquitin (linkage-specific K27) with ab181537 at 1/500 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on cancer cells of Human bladder transitional cell carcinoma is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181537</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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