abcam

Product datasheet

Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448] - BSA and Azide free ab271929

Recombinant

RabMAb

4 Images

Overview

Product name Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448] - BSA and Azide free

Description Rabbit monoclonal [EPR8590-448] to Ubiquitin (linkage-specific K63) - BSA and Azide free

Host species Rabbit

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

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: K63-linked-Ub2-7 recombinant protein, HEK-293 and HeLa cell lysates, and Mouse and rat

brain lysate. IHC-P: Human kidney carcinoma and tonsil tissue. Flow Cyt (intra): HeLa cells.

General notes ab271929 is the carrier-free version of ab179434.

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 <u>conjugation kits</u> 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 EPR8590-448

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab271929 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 |
|------------------|-----------|--|
| IHC-P | | Use at an assay dependent concentration. |
| WB | | Use at an assay dependent concentration. Predicted molecular weight: 26 kDa. |
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |

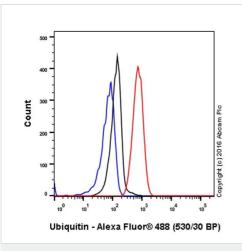
Target

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-11linked 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 ubiquitinlike domains.

Cellular localization

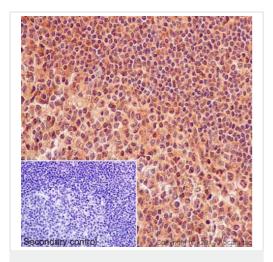
Cell Membrane, Cytoplasmic and Nuclear



Flow Cytometry (Intracellular) - Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448] -BSA and Azide free (ab271929)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labelling Ubiquitin (linkage-specific K63) with purified <u>ab179434</u> at 1/210 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. An Alexa Fluor[®]488-conjugated goat anti-rabbit lgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

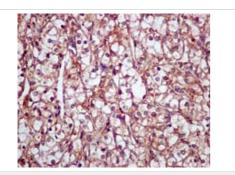
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab179434</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448] - BSA and Azide free (ab271929)

Immunohistochemical staining of paraffin embedded human tonsil with purified <u>ab179434</u> at a dilution of 1/500. The secondary antibody used is a HRP conjugated goat anti-rabbit (<u>ab97051</u>, 1/500). The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab179434).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448] - BSA and Azide free (ab271929)

Immunohistochemical analysis of paraffin-embedded human kidney carcinoma tissue labeling K63-linkage specific polyubiquitin with unpurified <u>ab179434</u> at 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab179434</u>).



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- · Valid for 12 months from date of delivery

[EPR8590-448] - BSA and Azide free (ab271929)

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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