abcam

Product datasheet

Alexa Fluor® 488 Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448] ab192539

Recombinant RabMAb

1 References 2 Images

Overview

Product name Alexa Fluor® 488 Anti-Ubiquitin (linkage-specific K63) antibody [EPR8590-448]

Description Alexa Fluor® 488 Rabbit monoclonal [EPR8590-448] to Ubiquitin (linkage-specific K63)

Host species Rabbit

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

Tested applications Suitable for: Flow Cyt (Intra)

Species reactivity Reacts with: Human

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

Positive control Flow Cyt (intra): HeLa cells.

General notes 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EPR8590-448

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab192539 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
Flow Cyt (Intra)		Use 0.2µl for 10 ⁶ cells. ab199091 - Rabbit monoclonal lgG (Alexa Fluor® 488), is suitable for use as an isotype control with this antibody.

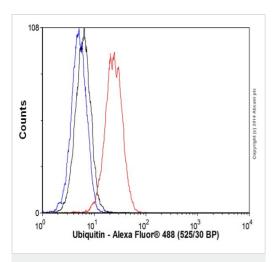
Target

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) - Alexa Fluor® 488 Anti-Ubiquitin (Iinkage-specific K63) antibody [EPR8590-448] (ab192539)

Overlay histogram showing HeLa cells stained with ab192539 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab192539, 0.2 μ l/1x10⁶ cells) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (Alexa[®] 488) (0.2 μ l/1x10⁶ cells) for 30 min at 22°C. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

This antibody gave a positive signal in HeLa fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



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