abcam

Product datasheet

Anti-USP10 antibody [EPR4261] - BSA and Azide free ab239953

KO VALIDATED Recombinant RabMAb

2 Images

Overview

Product name	Anti-USP10 antibody [EPR4261] - BSA and Azide free
Description	Rabbit monoclonal [EPR4261] to USP10 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, IP, ICC/IF, WB **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human USP10 aa 1-100. The exact sequence is proprietary.
General notes	ab239953 is the carrier-free version of ab109219 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. 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. Ab239953 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information. 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.

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.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4261
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab239953** in the following tested applications.

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

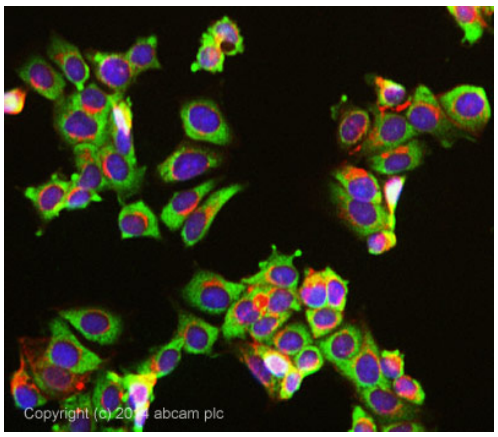
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 110 kDa (predicted molecular weight: 87 kDa).

Application notes Is unsuitable for Flow Cyt.

Target

Function	Hydrolase that can remove conjugated ubiquitin from target proteins such as p53/TP53, SNX3 and CFTR. Acts as an essential regulator of p53/TP53 stability: in unstressed cells, specifically deubiquitinates p53/TP53 in the cytoplasm, leading to counteract MDM2 action and stabilize p53/TP53. Following DNA damage, translocates to the nucleus and deubiquitinates p53/TP53, leading to regulate the p53/TP53-dependent DNA damage response. Does not deubiquitinate MDM2. Deubiquitinates CFTR in early endosomes, enhancing its endocytic recycling.
Tissue specificity	Widely expressed.
Sequence similarities	Belongs to the peptidase C19 family. USP10 subfamily.
Post-translational modifications	Phosphorylated by ATM following DNA damage, leading to stablization and translocation it to the nucleus.
Cellular localization	Cytoplasm. Nucleus. Early endosome. Cytoplasmic in normal conditions. After DNA damage, translocates to the nucleus following phosphorylation by ATM.

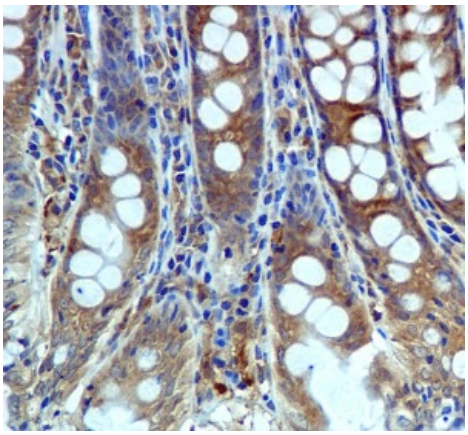
Images



Immunocytochemistry/ Immunofluorescence - Anti-USP10 antibody [EPR4261] - BSA and Azide free (ab239953)

ICC/IF image of ab109219 stained MCF-7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab109219 at 1/50 dilution overnight at +4°C. The secondary antibody (pseudo-colored green) was Alexa Fluor® 488 goat anti-rabbit (ab150081) IgG (H+L) preadsorbed, used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1h at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1hour at room temperature.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109219).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-USP10 antibody [EPR4261] - BSA and Azide free (ab239953)

ab109219, at a 1/250 dilution, staining USP10 in paraffin embedded Human colon tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109219).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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