

Product datasheet

Anti-USP5 antibody [EPR10454] ab154170

Recombinant RabMAb

[7 References](#) [7 Images](#)

Overview

Product name	Anti-USP5 antibody [EPR10454]
Description	Rabbit monoclonal [EPR10454] to USP5
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human USP5. The exact sequence is proprietary. Database link: P45974
Positive control	WB: MCF7 and A549 whole cell lysates. Human, mouse, and rat brain tissue lysates. Mouse and rat heart and kidney tissue lysates; ICC/IF: MCF7 and A549 cells; Flow Cyt (intra): MCF7 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10454
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab154170 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)		1/50. For unpurified use at 1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Predicted molecular weight: 96 kDa. For unpurified use at 1/1000 - 1/10000.
ICC/IF		1/50. For unpurified use at 1/50 - 1/100.

Target

Function

Cleaves linear and branched multiubiquitin polymers with a marked preference for branched polymers. Involved in unanchored 'Lys-48'-linked polyubiquitin disassembly. Binds linear and 'Lys-63'-linked polyubiquitin with a lower affinity. Knock-down of USP5 causes the accumulation of p53/TP53 and an increase in p53/TP53 transcriptional activity because the unanchored polyubiquitin that accumulates is able to compete with ubiquitinated p53/TP53 but not with MDM2 for proteasomal recognition.

Sequence similarities

Belongs to the peptidase C19 family.
Contains 2 UBA domains.
Contains 1 UBP-type zinc finger.

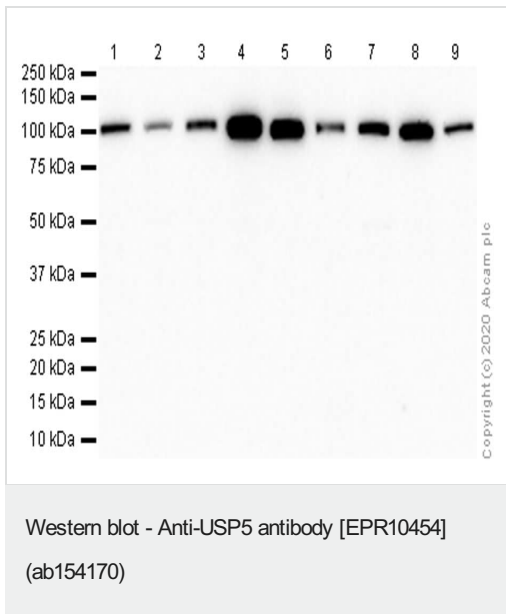
Domain

The UBP-type zinc finger domain interacts selectively with an unmodified C-terminus of the proximal ubiquitin. Both UBA domains are involved in polyubiquitin recognition.

Post-translational modifications

The N-terminus is blocked.

Images



All lanes : Anti-USP5 antibody [EPR10454] (ab154170) at 1/1000 dilution (purified)

Lane 1 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : A549 (Human lung carcinoma epithelial cell) whole cell lysate

Lane 3 : Human brain lysate

Lane 4 : Mouse brain lysate

Lane 5 : Rat brain lysate

Lane 6 : Mouse heart lysate

Lane 7 : Rat heart lysate

Lane 8 : Mouse kidney lysate

Lane 9 : Rat kidney lysate

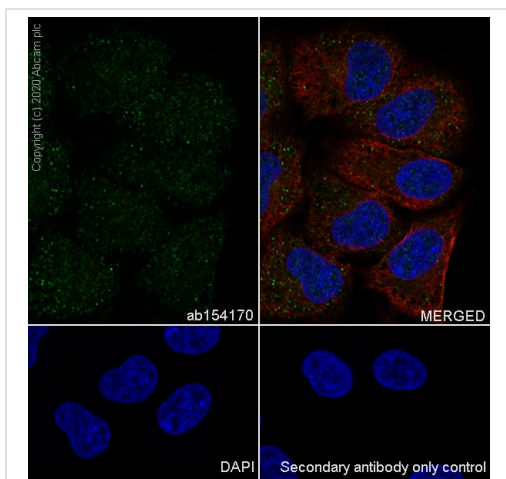
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

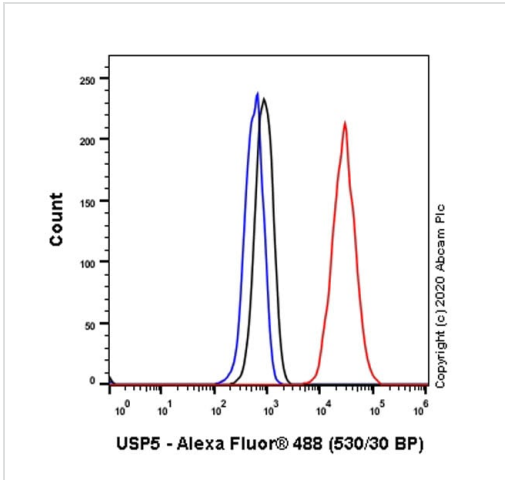
Predicted band size: 96 kDa

Observed band size: 96 kDa



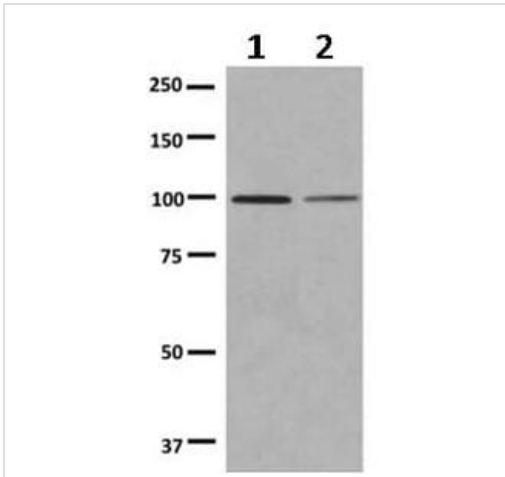
Immunocytochemistry/ Immunofluorescence analysis of A549 (Human lung carcinoma epithelial cell) cells labeling USP5 with purified ab154170 at 1/50 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% TritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-USP5 antibody [EPR10454] (ab154170)



Flow Cytometry (Intracellular) - Anti-USP5 antibody [EPR10454] (ab154170)

Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling USP5 with purified ab154170 at 1/50 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-USP5 antibody [EPR10454] (ab154170)

All lanes : Anti-USP5 antibody [EPR10454] (ab154170) at 1/1000 dilution (unpurified)

Lane 1 : MCF7 cell lysate

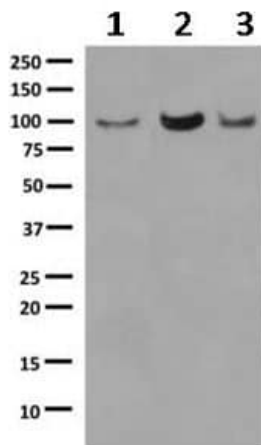
Lane 2 : A549 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 96 kDa



Western blot - Anti-USP5 antibody [EPR10454] (ab154170)

All lanes : Anti-USP5 antibody [EPR10454] (ab154170) at 1/1000 dilution (unpurified)

Lane 1 : Mouse brain lysates

Lane 2 : Rat brain lysates

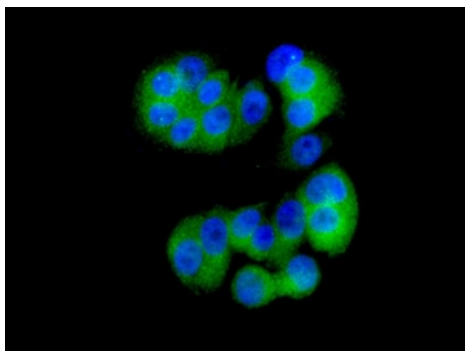
Lane 3 : Rat heart lysates

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 96 kDa



Immunocytochemistry/ Immunofluorescence - Anti-USP5 antibody [EPR10454] (ab154170)

Immunofluorescent analysis of MCF7 cells labeling USP5 with unpurified ab154170 at 1/50 dilution.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-USP5 antibody [EPR10454] (ab154170)

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

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