abcam

ab133548

Anti-CSN7b antibody [EPR6464]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR6464
Purification technique	Affinity purification Protein A
Dissociation constant	1.12×10^{-10} M
Concentration	0.114 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Expected

Species	Mouse
Dilution info	1/10000 - 1/50000
Notes	-

Species	Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/250 - 1/500
Notes	-

Expected

Species	Mouse
Dilution info	1/250 - 1/500
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/200

Notes	-

Expected

Species	Mouse
Dilution info	1/200
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

Target data

See full target information COPS7B

Function Component of the COP9 signalosome complex (CSN), a complex involved in various cellular and developmental processes. The CSN complex is an essential regulator of the ubiquitin (Ubl) conjugation pathway by mediating the deneddylation of the cullin subunits of SCF-type E3 ligase complexes, leading to decrease the Ubl ligase activity of SCF-type complexes such as SCF, CSA or DDB2. The complex is also involved in phosphorylation of p53/TP53, JUN, I-kappa-B-alpha/NFKBIA, ITPK1 and IRF8/ICSBP, possibly via its association with CK2 and PKD kinases. CSN-dependent phosphorylation of TP53 and JUN promotes and protects degradation by the Ubl system, respectively.

Storage

Shipped at conditions Conditional Ambient

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

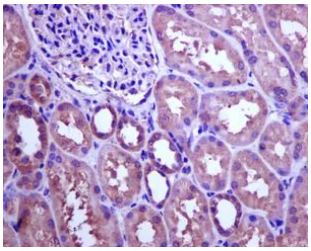
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

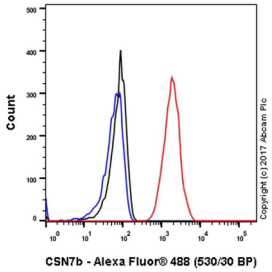
6 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CSN7b antibody [EPR6464] (ab133548)

CSN7b Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CSN7b antibody

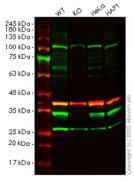
Immunohistochemical analysis of paraffin embedded Human kidney tissue labelling CSN7b with ab133548 antibody at a dilution of 1/250.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CSN7b antibody [EPR6464] (ab133548)

CSN7b Flow Cytometry (Intracellular) staining using rabbit Anti-CSN7b antibody

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling CSN7b with unpurified ab133548 at 1/200 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti-rabbit IgG (Alexa Fluorr® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-CSN7b antibody [EPR6464] (ab133548)

CSN7b Western blot staining using rabbit Anti-CSN7b antibody

Lanes 1-4: Merged signal (red and green). Green - ab133548 observed at 32 kDa. Red - loading control ab8245 observed at 36 kDa.
ab133548 Anti-CSN7b antibody [EPR6464] was shown to specifically react with CSN7b in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266646 (knockout cell lysate ab257895) was used. Wild-type and CSN7b knockout samples were subjected to SDS-PAGE. ab133548 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-CSN7b antibody [EPR6464] (ab133548) at 1/1000 dilution

Lane 1:
Wild-type HEK293T cell lysate at 20 µg

Lane 2:
Western blot - Human COPS7B (CSN7b) knockout HEK-293T cell lysate (ab257895) at 20 µg

Lane 3:

HeLa cell lysate at 20 µg

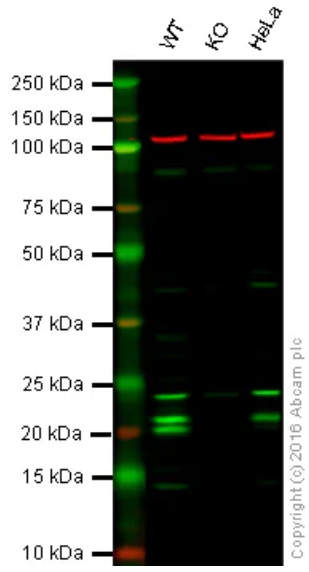
Lane 4:
HAP1 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 30 kDa

Observed band size: 32 kDa

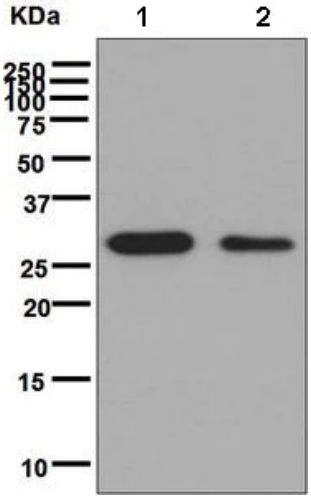


Western blot - Anti-CSN7b antibody [EPR6464] (ab133548)

CSN7b Western blot staining using rabbit Anti-CSN7b antibody

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: CSN7b knockout HAP1 cell lysate (20 µg)
Lane 3: HeLa cell lysate (20 µg)
Lanes 1 - 3: Merged signal (red and green). Green - ab133548 observed at 32 kDa. Red - loading control, ab18058, observed at 124 kDa.
ab133548 was shown to specifically react with CSN7b when CSN7b knockout samples were used. Wild-type and CSN7b knockout samples were subjected to SDS-PAGE. ab133548 and ab18058 (loading control to vinculin) were both diluted 1/10000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.
All lanes:
Western blot - Anti-CSN7b antibody [EPR6464] (ab133548)

Predicted band size: 30 kDa



Western blot - Anti-CSN7b antibody [EPR6464] (ab133548)

All lanes:
Western blot - Anti-CSN7b antibody [EPR6464] (ab133548) at 1/10000 dilution

Lane 1:
Jurkat cell lysate at 10 µg

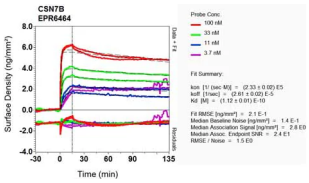
Lane 2:
HeLa cell lysate at 10 µg

Secondary

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

Predicted band size: 30 kDa

Observed band size: 30 kDa



OI-RD Scanning - Anti-CSN7b antibody [EPR6464] (ab133548)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.