abcam

Product datasheet

Anti-RBX1 antibody [EPR6850(B)] ab133565

Recombinant RabMAb

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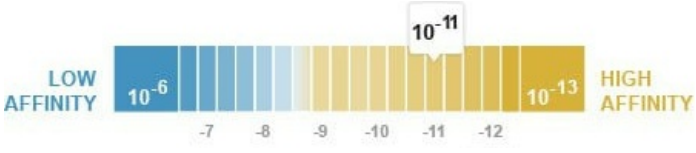
Overview

Product name	Anti-RBX1 antibody [EPR6850(B)]
Description	Rabbit monoclonal [EPR6850(B)] to RBX1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), IP, IHC-P, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP: Jurkat whole cell lysate. Flow Cyt: Jurkat cells. ICC/IF: HeLa cells. IHC-P: Rat and mouse breast tissue. Human lung carcinoma tissue. WB: Jurkat whole cell lysate. Mouse and rat heart lysate.
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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K_D = 2.18 x 10 $^{-11}$ M  **Learn more about K_D**
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide

	Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6850(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133565 in the following tested applications.

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

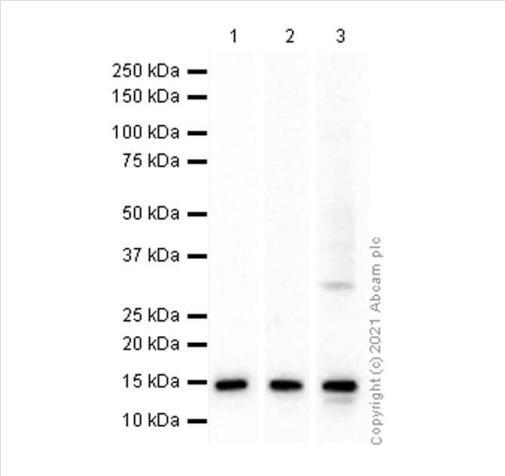
Application	Abreviews	Notes
Flow Cyt (Intra)		1/20. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified format use at 1/100 to 1/1000 dilution
IP		1/10 - 1/100.
IHC-P		1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. For unpurified format use 1/100 to 1/250 dilution
WB		1/5000. Detects a band of approximately 13 kDa (predicted molecular weight: 12 kDa). For unpurified format use 1/1000 to 1/10000 dilution
ICC/IF	★★★★☆ (1)	1/50.

Target

Function	E3 ubiquitin ligase component of multiple cullin-RING-based E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins, including proteins involved in cell cycle progression, signal transduction, transcription and transcription-coupled nucleotide excision repair. The functional specificity of the E3 ubiquitin-protein ligase complexes depends on the variable substrate recognition components. As a component of the CSA complex promotes the ubiquitination of ERCC6 resulting in proteasomal degradation. Through the RING-type zinc finger, seems to recruit the E2 ubiquitination enzyme, like CDC34, to the complex and brings it into close proximity to the substrate. Probably also stimulates CDC34 autoubiquitination. May be required for histone H3 and histone H4 ubiquitination in response to ultraviolet and for subsequent DNA repair. Promotes the neddylation of CUL1, CUL2, CUL4 and CUL4 via its interaction with UBE2M.
Tissue specificity	Widely expressed.
Pathway	Protein modification; protein ubiquitination.
Sequence similarities	Belongs to the RING-box family. Contains 1 RING-type zinc finger.

Domain	The RING-type zinc finger domain is essential for ubiquitin ligase activity. It coordinates an additional third zinc ion.
Cellular localization	Cytoplasm. Nucleus.

Images



Western blot - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

All lanes : Anti-RBX1 antibody [EPR6850(B)] (ab133565) at 1/5000 dilution

Lane 1 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate
Lane 2 : Mouse heart lysate
Lane 3 : Rat heart lysate

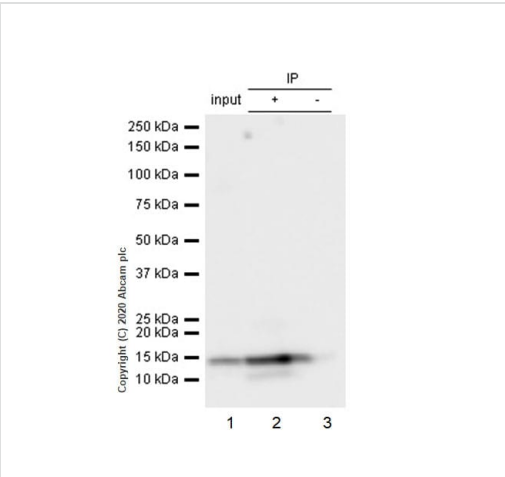
Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 12 kDa
Observed band size: 13 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Image produced using the purified version.



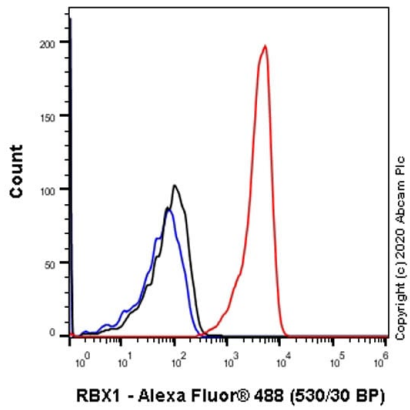
Immunoprecipitation - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

Purified ab133565 at 1:20 dilution (1µg) immunoprecipitating RBX1 in Jurkat whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10µg.
Lane 2 (+): ab133565 + Jurkat whole cell lysate.
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab133565 in Jurkat whole cell lysate.

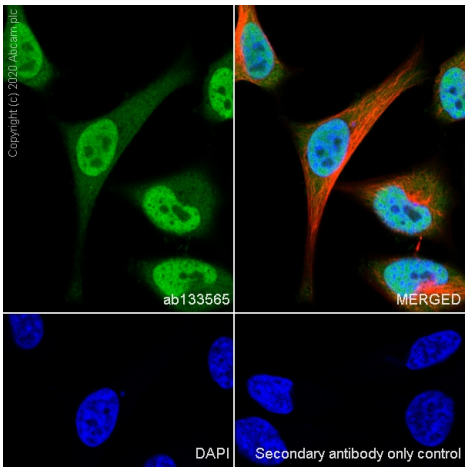
VeriBlot for IP Detection Reagent (HRP)(**ab131366**) (1:1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 13 kDa



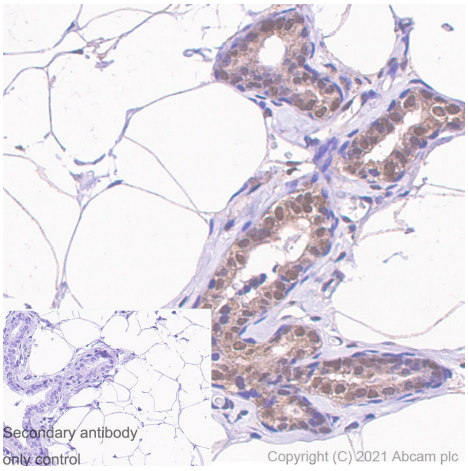
Flow Cytometry (Intracellular) - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labelling RBX1 with Purified ab133565 at 1:20 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). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



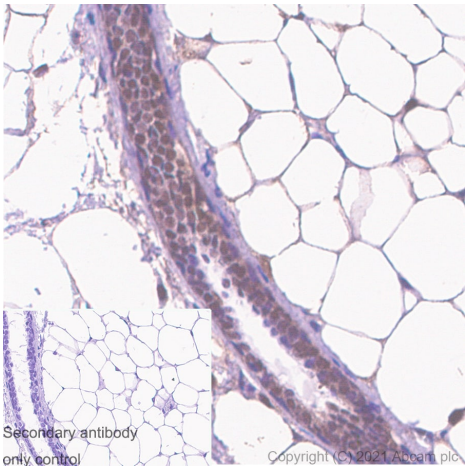
Immunocytochemistry/ Immunofluorescence - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling RBX1 with Purified ab133565 at 1:50 dilution (3.9 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.



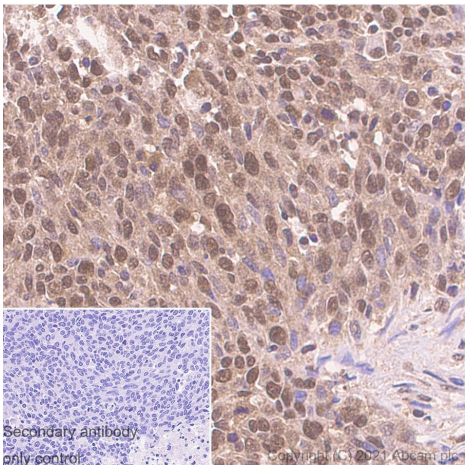
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat breast tissue sections labeling RBX1 with Purified ab133565 at 1:2000 dilution (0.099 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



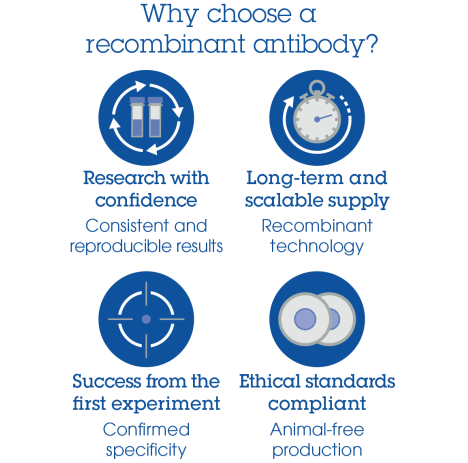
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse breast tissue sections labeling RBX1 with Purified ab133565 at 1:2000 dilution (0.099 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBX1 antibody [EPR6850(B)] (ab133565)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue sections labeling RBX1 with Purified ab133565 at 1:2000 dilution (0.099 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Anti-RBX1 antibody [EPR6850(B)] (ab133565)

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