


Product datasheet

Anti-CBL + CBLB antibody [YE315] ab32425

RabMAb

6 Images

Overview

Product name	Anti-CBL + CBLB antibody [YE315]
Description	Rabbit monoclonal [YE315] to CBL + CBLB
Host species	Rabbit
Specificity	The immunogen sequence is 100% identical for both CBL and CBLB, therefore there is likely to be cross-reactivity.
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Chicken 
Immunogen	Synthetic peptide within Human CBL aa 450-550. The exact sequence is proprietary. Database link: P22681
Positive control	WB: HuT-78, HeLa and Jurkat cell lysate. IHC-P: Human uterus adenocarcinoma and colon tissues. ICC/IF: Jurkat cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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 <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20

	Preservative: 0.01% Sodium azide
	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	YE315
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab32425 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
WB		1/5000. Detects a band of approximately 120 kDa (predicted molecular weight: 99 kDa). For unpurified use at 1/500.
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
ICC/IF		1/250. For unpurified use at 1/100.

Target

Relevance

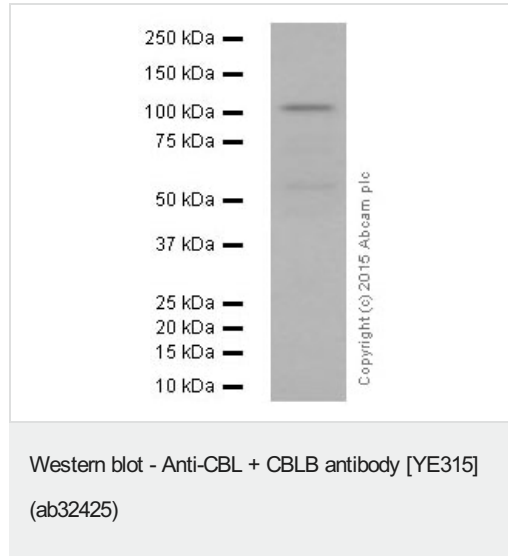
CBL: Adapter protein that functions as a negative regulator of many signaling pathways that are triggered by activation of cell surface receptors. Acts as an E3 ubiquitin-protein ligase, which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome. Recognizes activated receptor tyrosine kinases, including KIT, FLT1, FGFR1, FGFR2, PDGFRA, PDGFRB, EGFR, CSF1R, EPHA8 and KDR and terminates signaling. Recognizes membrane-bound HCK, SRC and other kinases of the SRC family and mediates their ubiquitination and degradation. Participates in signal transduction in hematopoietic cells. Plays an important role in the regulation of osteoblast differentiation and apoptosis. Essential for osteoclastic bone resorption. The 'Tyr-731' phosphorylated form induces the activation and recruitment of phosphatidylinositol 3-kinase to the cell membrane in a signaling pathway that is critical for osteoclast function. May be functionally coupled with the E2 ubiquitin-protein ligase UB2D3. Pathway:protein ubiquitination. This protein is involved in the pathway protein ubiquitination, which is part of Protein modification. CBLB: E3 ubiquitin-protein ligase which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and transfers it to substrates, generally promoting their degradation by the proteasome. Negatively regulates TCR (T-cell receptor), BCR (B-cell receptor) and FCER1 (high affinity immunoglobulin epsilon receptor) signal transduction pathways. In naive T-cells, inhibits VAV1 activation upon TCR engagement and imposes a requirement for CD28 costimulation for proliferation and IL-2 production. Also acts by promoting PIK3R1/p85 ubiquitination, which impairs its recruitment to the TCR and subsequent activation. In activated T-cells, inhibits PLCG1 activation and calcium mobilization upon restimulation and promotes anergy. In B-cells, acts by ubiquitinating SYK and promoting its proteasomal degradation. Slightly promotes SRC ubiquitination. May be involved in EGFR ubiquitination and internalization. May be functionally

coupled with the E2 ubiquitin-protein ligase UB2D3. Pathway: protein ubiquitination. This protein is involved in the pathway protein ubiquitination, which is part of Protein modification.

Cellular localization

CBL: Cytoplasm. CBLB: Cytoplasmic and Nuclear

Images



Anti-CBL + CBLB antibody [YE315] (ab32425) at 1/20000 dilution (purified) + HeLa cell lysate at 10 µg

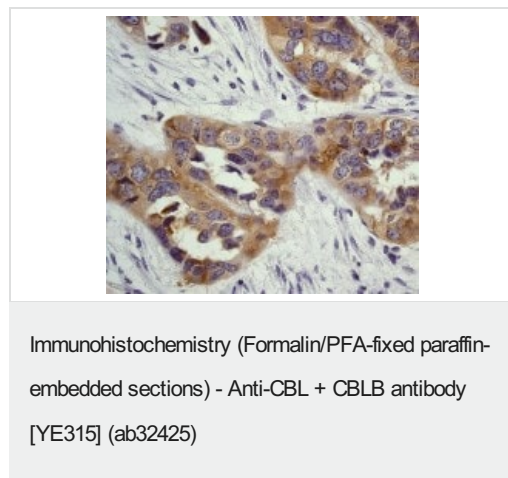
Secondary

Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 99 kDa

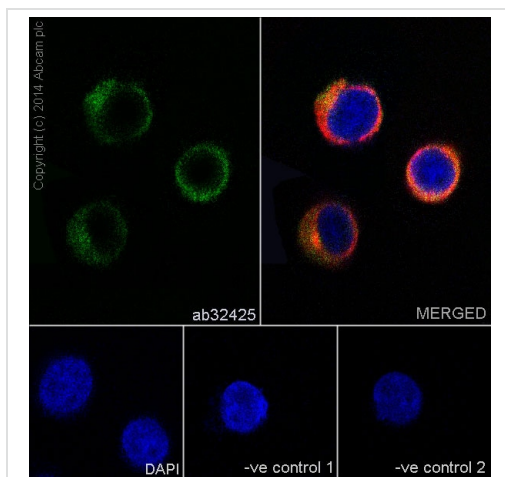
Observed band size: 120 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human uterus adenocarcinoma tissue labelling CBL + CBLB with unpurified ab32425 at a dilution of 1/50.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

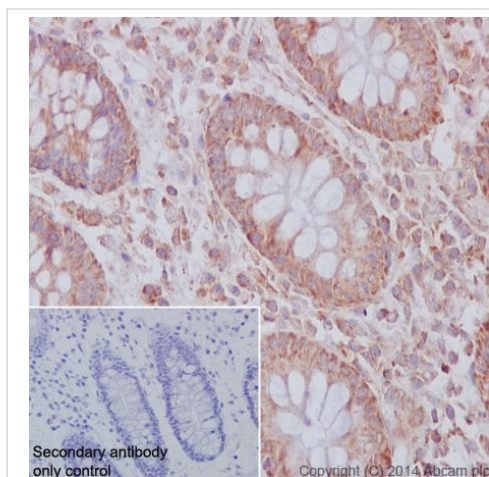


Immunocytochemistry/ Immunofluorescence - Anti-CBL + CBLB antibody [YE315] (ab32425)

Immunocytochemistry/Immunofluorescence analysis of Jurkat cells labelling CBL + CBLB with purified ab32425 at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500) were also used.

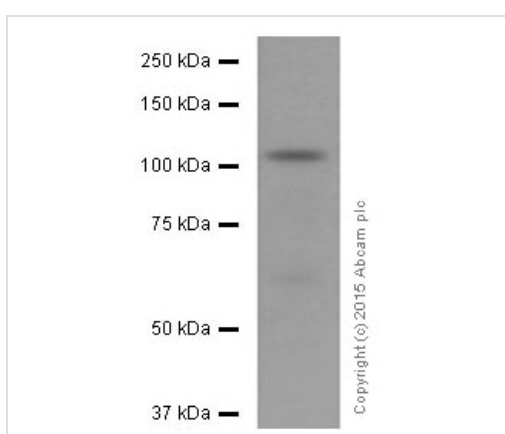
Control 1: primary antibody (1/250) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CBL + CBLB antibody [YE315] (ab32425)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling CBL + CBLB with purified ab32425 at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Western blot - Anti-CBL + CBLB antibody [YE315] (ab32425)

Anti-CBL + CBLB antibody [YE315] (ab32425) at 1/5000 dilution (purified) + HuT-78 cell lysate at 10 µg

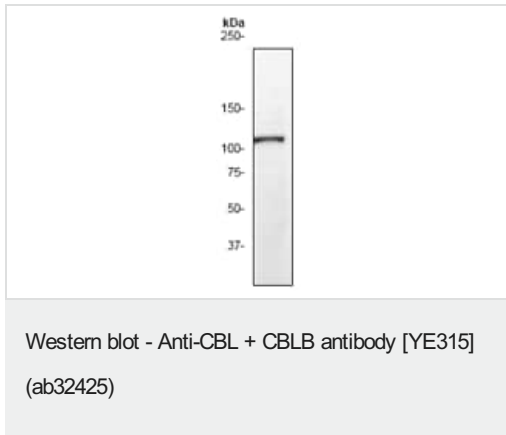
Secondary

Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 99 kDa

Observed band size: 120 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Anti-CBL + CBLB antibody [YE315] (ab32425) at 1/500 dilution
(unpurified) + Jurkat cell lysate

Predicted band size: 99 kDa

Observed band size: 120 kDa

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