

Product datasheet

Anti-eIF4EBP1 antibody [Y330] - BSA and Azide free ab173322

KO VALIDATED Recombinant RabMAb

3 Images

Overview

Product name	Anti-eIF4EBP1 antibody [Y330] - BSA and Azide free
Description	Rabbit monoclonal [Y330] to eIF4EBP1 - BSA and Azide free
Host species	Rabbit
Specificity	This antibody recognises 4E-BP1 (eIF4E-binding protein) also known as PHAS.
Tested applications	Suitable for: IHC-P, WB, Flow Cyt (Intra) Unsuitable for: ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, HEK-293 cell lysate, HAP1 and K562 cell lysate, IHC-P: Human prostate carcinoma, FLOW Cyt: HeLa cells
General notes	<p>ab173322 is the carrier-free version of ab32130.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>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.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <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>

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

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Y330
Isotype	IgG

Applications

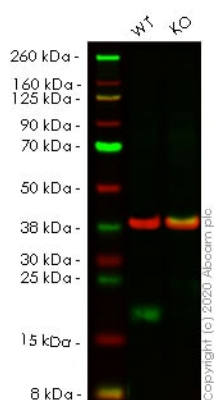
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab173322 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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.
WB		Use at an assay dependent concentration. Detects a band of approximately 15-20 kDa (predicted molecular weight: 12 kDa).
Flow Cyt (Intra)		Use at an assay dependent concentration.

Application notes Is unsuitable for ICC/IF.

Target

Function	Regulates eIF4E activity by preventing its assembly into the eIF4F complex. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways.
Sequence similarities	Belongs to the eIF4E-binding protein family.
Post-translational modifications	Phosphorylated on serine and threonine residues in response to insulin, EGF and PDGF. Phosphorylation at Thr-37, Thr-46, Ser-65 and Thr-70 is regulated by mTORC1. Phosphorylated upon DNA damage, probably by ATM or ATR.



Western blot - Anti-eIF4EBP1 antibody [Y330] - BSA and Azide free (ab173322)

All lanes : Anti-eIF4EBP1 antibody [Y330] ([ab32130](#)) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : EIF4EBP1 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

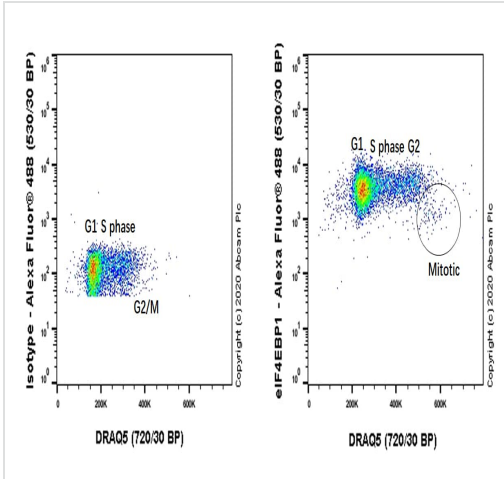
Predicted band size: 12 kDa

Observed band size: 13 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab32130](#)).

Lanes 1-2: Merged signal (red and green). Green - [ab32130](#) observed at 13 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab32130](#) Anti-eIF4EBP1 antibody [Y330] was shown to specifically react with eIF4EBP1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab264784](#) (knockout cell lysate [ab257146](#)) was used. Wild-type and eIF4EBP1 knockout samples were subjected to SDS-PAGE. [ab32130](#) 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.



This data was developed using [ab32130](#), the same antibody clone in a different buffer formulation.

Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling eIF4EBP1 with purified [ab32130](#) at 1/1000 dilution (1 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 (Left). Low expression in mitotic phase was consistent with literature. (PMID: 11553333)

Flow Cytometry (Intracellular) - Anti-eIF4EBP1 antibody [Y330] - BSA and Azide free (ab173322)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-eIF4EBP1 antibody [Y330] - BSA and Azide free (ab173322)

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

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