abcam

ab180602

Anti-EBP1 antibody [EPR14569(B)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	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	EPR14569(B)
Purification technique	Affinity purification Protein A
Concentration	0.111 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

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

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information PA2G4

Function May play a role in a ERBB3-regulated signal transduction pathway. Seems be involved in growth regulation. Acts a corepressor of the androgen receptor (AR) and is regulated by the ERBB3 ligand neuregulin-1/heregulin (HRG). Inhibits transcription of some E2F1-regulated promoters, probably by recruiting histone acetylase (HAT) activity. Binds RNA. Associates with 28S, 18S and 5.8S mature rRNAs, several rRNA precursors and probably U3 small nucleolar RNA. May be involved in regulation of intermediate and late steps of rRNA processing. May be involved in ribosome assembly. Mediates cap-independent translation of specific viral IRESs (internal ribosomal entry site) (By similarity). Regulates cell proliferation, differentiation, and survival. Isoform 1 suppresses apoptosis whereas isoform 2 promotes cell differentiation (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The EBP1 protein also known as ErbB3-binding protein 1 plays an important role in cellular mechanisms. With a mass of about 39 kDa EBP1 is widely expressed in various tissues including the heart liver and brain. The protein acts as an RNA-binding protein and it has demonstrated influence in the regulation of ribosomal RNA synthesis and processing. EBP1 also interacts with multiple other proteins which aid in its regulatory roles in the cells.
Biological function summary	EBP1 functions as a part of the cellular machinery involved in growth and differentiation. It associates with the eukaryotic translation initiation factor 4G (eIF4G) as part of a complex which modulates the translation of certain messenger RNAs. Furthermore EBP1 can function as a transcriptional co-repressor in the nucleus where it influences gene expression by interacting with DNA. Its activity in these roles highlights its important function in cell cycle regulation and cellular proliferation.
Pathways	Many signaling mechanisms engage EBP1. The PI3K/AKT pathway sees participation from EBP1 where it downstream affects cell survival and growth. EBP1 also interacts with the NF-κB pathway contributing to the regulation of immune and stress responses. In these pathways interactions with key proteins

like AKT and NF-κB p65 emphasize its role in integrating signaling cues for responses to environmental stimuli.

Associated diseases and disorders

EBP1 has shown associations with cancer and neurodegenerative diseases. Its connection with cancer is evident as EBP1 influences cell proliferation and can affect tumor suppressor pathways sometimes interacting with proteins like HER2. In neurodegenerative diseases deregulation of EBP1 function has been seen in conditions such as Alzheimer's potentially interacting with proteins involved in tau phosphorylation. Both examples demonstrate the biological significance of EBP1 in maintaining normal physiological function and its contributions to pathology when dysregulated.

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

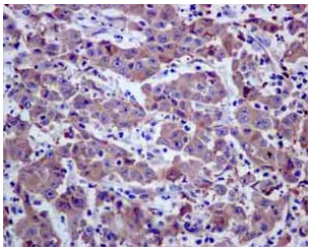
We do not recommend this combination. It is not covered by our product promise.

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.

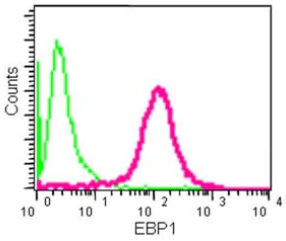
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EBP1 antibody [EPR14569(B)] (ab180602)

EBP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EBP1 antibody

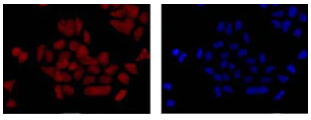
Immunohistochemical analysis of paraffin-embedded Human colon adenocarcinoma tissue labeling EBP1 with ab180602 at 1/100 dilution, followed by prediluted ImmunoHistoprobe HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-EBP1 antibody [EPR14569(B)] (ab180602)

EBP1 Flow Cytometry (Intracellular) staining using rabbit Anti-EBP1 antibody

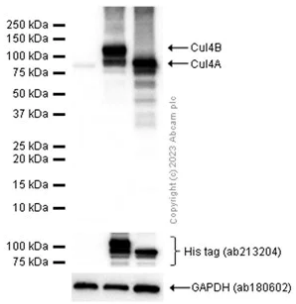
Intracellular flow cytometric analysis of2% paraformaldehyde-fixedJurkat cells labeling EBP1 with ab180602 at 1/20 dilution (red) compared to a Rabbit monoclonal IgG Isotypecontrol (green), followed byGoat anti rabbit IgG (FITC)at 1/150 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-EBP1 antibody [EPR14569(B)] (ab180602)

EBP1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-EBP1 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling EBP1 with 180602 at 1/100 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 555) secondary antibody at 1/200 dilution (Left panel). Right panel: Dapi staining.



Western blot - Anti-EBP1 antibody [EPR14569(B)] (ab180602)

EBP1 Western blot staining using rabbit Anti-EBP1 antibody

Blocking buffer and concentration: 5% NFDM/TBST. **Diluting buffer and concentration:** 5% NFDM/TBST. ab92554 recognizes human Cul4A and Cul4B overexpression vectors. ab180602 was used as a loading control.
All lanes:
Western blot - Anti-Cullin 4A/CUL-4A antibody [EPR3198] (ab92554) at 1/10000 dilution

Lane 1:
HEK-293 (Human embryonic kidney epithelial cell) transfected with blank vectors whole cell lysate at 20 µg

Lane 2:
HEK-293 (Human embryonic kidney epithelial cell) transfected with human full length Cul4B expression vectors whole cell lysate at 20 µg

Lane 3:
HEK-293 (Human embryonic kidney epithelial cell) transfected with human full length Cul4A expression vectors whole cell lysate at 20 µg

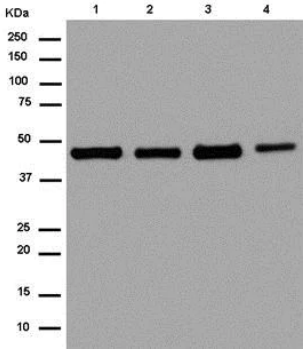
Secondary

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

Predicted band size: 88 kDa

Observed band size: 88 kDa, 104 kDa

Exposure time: 1s



Western blot - Anti-EBP1 antibody [EPR14569(B)] (ab180602)

All lanes:
Western blot - Anti-EBP1 antibody [EPR14569(B)] (ab180602) at 1/20000 dilution

Lane 1:
293T lysate at 20 µg

Lane 2:
HeLa lysate at 20 µg

Lane 3:
Jurkat lysate at 20 µg

Lane 4:
A431 lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 44 kDa

Observed band size: 48 kDa

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