abcam

Product datasheet

Anti-CIRP antibody [EPR23628-36] ab246510

Recombinant RabMAb

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Overview

Product name	Anti-CIRP antibody [EPR23628-36]
Description	Rabbit monoclonal [EPR23628-36] to CIRP
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP **Unsuitable for:** Flow Cyt,ICC/IF or IHC-P
Species reactivity	**Reacts with:** Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NIH/3T3 and NIH/3T3 treated at 32°C for 48 hours, whole cell lysates; Mouse testis tissue lysate; Rat testis tissue lysate. IP: Mouse testis tissue 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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23628-36

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab246510 in the following tested applications.

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

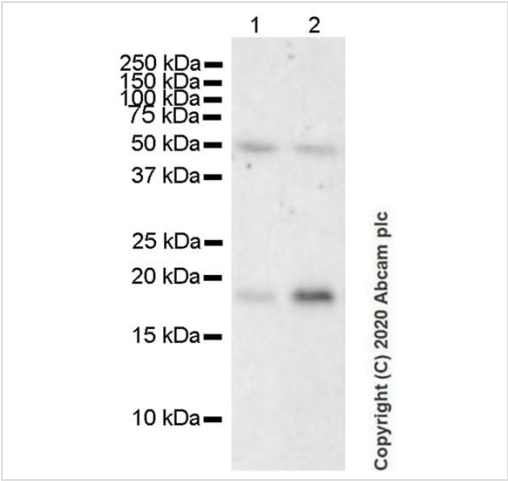
Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000. Detects a band of approximately 18 kDa (predicted molecular weight: 18 kDa).
IP		1/30.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

Target

Function	Cold-inducible mRNA binding protein that plays a protective role in the genotoxic stress response by stabilizing transcripts of genes involved in cell survival. Acts as a translational activator. Seems to play an essential role in cold-induced suppression of cell proliferation. Binds specifically to the 3'-untranslated regions (3'-UTRs) of stress-responsive transcripts RPA2 and TXN. Acts as a translational repressor (By similarity). Promotes assembly of stress granules (SGs), when overexpressed.
Tissue specificity	Ubiquitous.
Sequence similarities	Contains 1 RRM (RNA recognition motif) domain.
Domain	Both the RRM domain and the arginine, glycine (RGG) rich domain are necessary for binding to the TXN 3'-untranslated region. Both the RRM domain and the arginine, glycine (RGG) rich domain (RGG repeats) are necessary for optimal recruitment into SGs upon cellular stress. The C-terminal domain containing RGG repeats is necessary for translational repression.
Post-translational modifications	Methylated on arginine residues. Methylation of the RGG motifs is a prerequisite for recruitment into SGs. Phosphorylated by CK2, GSK3A and GSK3B. Phosphorylation by GSK3B increases RNA-binding activity to the TXN 3'-UTR transcript upon exposure to UV radiation.
Cellular localization	Nucleus > nucleoplasm. Cytoplasm. Translocates from the nucleus to the cytoplasm after exposure to UV radiation. Translocates from the nucleus to the cytoplasm into stress granules upon various cytoplasmic stresses, such as osmotic and heat shocks. Its recruitment into stress granules occurs in the absence of TIAR proteins.

Images



Western blot - Anti-CIRP antibody [EPR23628-36] (ab246510)

All lanes : Anti-CIRP antibody [EPR23628-36] (ab246510) at 1/1000 dilution

Lane 1 : Untreated NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate
Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) treated with 32°C for 48 h whole cell lysate

Lysates/proteins at 20 µg per lane.

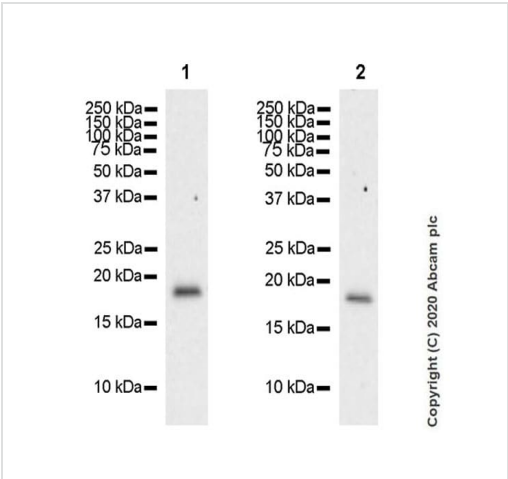
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 18 kDa
Observed band size: 18 kDa

Exposure time: 180 seconds

Blocking and dilution buffer: 5% NFDM/TBST.

This blot was developed using a **high** sensitivity ECL substrate.



Western blot - Anti-CIRP antibody [EPR23628-36] (ab246510)

All lanes : Anti-CIRP antibody [EPR23628-36] (ab246510) at 1/1000 dilution

Lane 1 : Mouse testis tissue lysate
Lane 2 : Rat testis tissue lysate

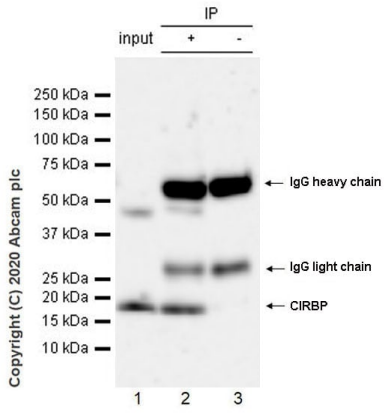
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution

Predicted band size: 18 kDa
Observed band size: 18 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.



Immunoprecipitation - Anti-CIRP antibody [EPR23628-36] (ab246510)

CIRBP was immunoprecipitated from 0.35 mg Mouse testis tissue lysate with ab246510 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab246510 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.

Lane 1: Mouse testis tissue lysate 10ug

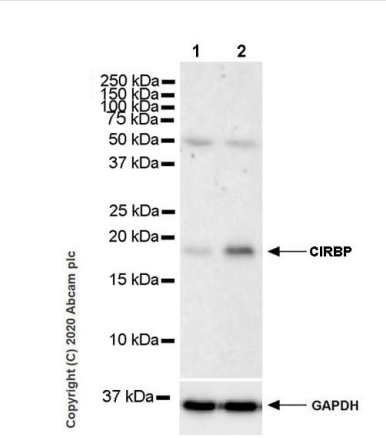
Lane 2: ab246510 IP in Mouse testis tissue lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab246510 in Mouse testis tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 47 seconds.

This blot was developed using a higher sensitivity ECL substrate.



Western blot - Anti-CIRP antibody [EPR23628-36] (ab246510)

All lanes : Anti-CIRP antibody [EPR23628-36] (ab246510) at 1/1000 dilution

Lane 1 : NIH/3T3 (mouse embryonic fibroblast) treated at 37°C for 48 hours, whole cell lysate
Lane 2 : NIH/3T3 treated at 32°C for 48 hours, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution

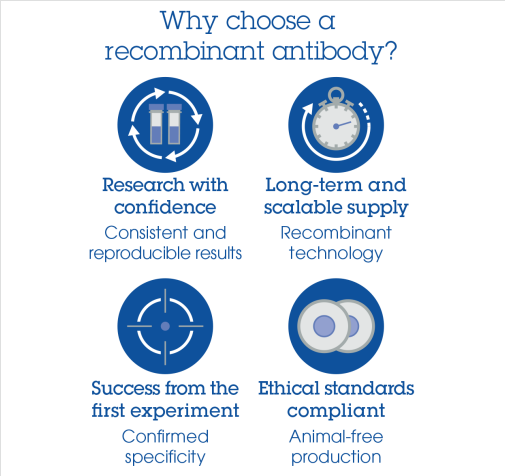
Predicted band size: 18 kDa
Observed band size: 18 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

This blot was developed using a higher sensitivity ECL substrate.

This antibody also recognized an undetermined band at around 50 kDa

Exposure time: 3 minutes.



Anti-CIRP antibody [EPR23628-36] (ab246510)

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