abcam

Product datasheet

Anti-TXNIP antibody [EPR14774] - BSA and Azide free ab215366



Recombinant

RabMAb

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Overview

Product name Anti-TXNIP antibody [EPR14774] - BSA and Azide free

Description Rabbit monoclonal [EPR14774] to TXNIP - BSA and Azide free

Host species Rabbit

Specificity Expression levels of the target protein vary with sample type and some optimisation may be

required. For western blotting, more concentrated lysates may be required when using

tissues samples.

Stimulation may be required to allow detection of the target protein due to low levels of endogenous expression in some samples. Please see images below for recommended

treatment conditions and positive controls.

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Human fetal thymus, BxPC-3, PC-12 and NIH/3T3 lysates; Human kidney and Mouse liver tissues;

HeLa and U87-MG cells. WB: Wild-type HAP1 whole cell lysate, MCF7 whole cell lysate and

K562 whole cell lysate.

General notes ab215366 is the carrier-free version of **ab18865**.

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.

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.

Use our <u>conjugation kits</u> 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.

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.

This product is a recombinant monoclonal antibody, which offers several advantages including:

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- 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. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR14774

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab215366 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		1/1000. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function

May act as an oxidative stress mediator by inhibiting thioredoxin activity or by limiting its bioavailability. Interacts with COPS5 and restores COPS5-induced suppression of CDKN1B stability, blocking the COPS5-mediated translocation of CDKN1B from the nucleus to the cytoplasm. Functions as a transcriptional repressor, possibly by acting as a bridge molecule between transcription factors and corepressor complexes, and over-expression will induce G0/G1 cell cycle arrest. Required for the maturation of natural killer cells.

Sequence similarities

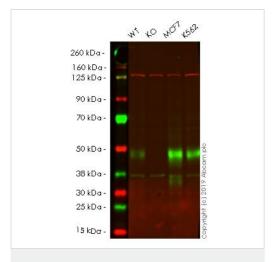
Belongs to the arrestin family.

Post-translational modifications

Ubiquitinated; undergoes polyubiquitination catalyzed by ITCH resulting in proteasomal

degradation.

Images



Western blot - Anti-TXNIP antibody [EPR14774] - BSA and Azide free (ab215366)

All lanes : Anti-TXNIP antibody [EPR14774] (<u>ab188865</u>) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: TXNIP knockout HAP1 whole cell lysate

Lane 3: MCF7 (human breast adenocarcinoma cell line) whole cell

lysate

Lane 4: K-562 (human chronic myelogenous leukemia

lymphoblasts cell line) whole cell lysate

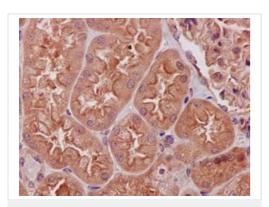
Lysates/proteins at 20 µg per lane.

Predicted band size: 44 kDa Observed band size: 44 kDa

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab188865</u> observed at 44 kDa. Red - loading control, <u>ab18058</u>, observed at 130 kDa.

ab188865 was shown to recognize TXNIP in wild-type HAP1 cells as signal was lost at the expected MW in TXNIP knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and TXNIP knockout samples were subjected to SDS-PAGE. ab188865 and ab18058 (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab188865</u>).



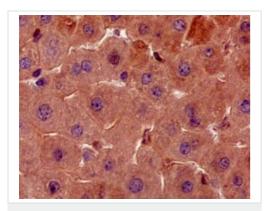
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TXNIP antibody

[EPR14774] - BSA and Azide free (ab215366)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling TXNIP with <u>ab188865</u> at 1/250 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab188865).

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

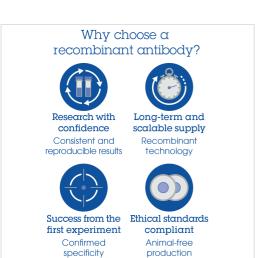


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TXNIP antibody
[EPR14774] - BSA and Azide free (ab215366)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling TXNIP with <u>ab188865</u> at 1/250 dilution followed by prediluted HRP Polymer for Rabbit lgG. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab188865</u>).

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



Anti-TXNIP antibody [EPR14774] - BSA and Azide free (ab215366)

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