abcam

Product datasheet

Anti-BNIP3 antibody [EPR4034] - BSA and Azide free ab219609

KO VALIDATED Recombinant RabMAb

4 References 5 Images

Overview

Product name	Anti-BNIP3 antibody [EPR4034] - BSA and Azide free
Description	Rabbit monoclonal [EPR4034] to BNIP3 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat cells, Jurkat cells treated with etoposide, SH-SY5Y cells, SH-SY5Y cells treated with camptothecin and MCF-7 cells treated with Cocl2 lysates and rat kidney, mouse spleen and mouse kidney tissue lysates. IHC-P: Human renal adenocarcinoma and kidney tissues. ICC/IF: HeLa and SH-SY5Y cells.
General notes	ab219609 is the carrier-free version of **ab109362**. 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 **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. 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: - 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: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4034
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab219609 in the following tested applications.

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

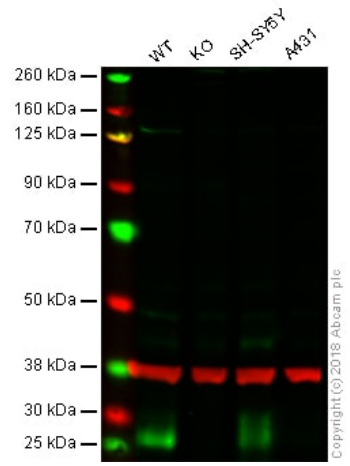
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 30 kDa (predicted molecular weight: 22 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. (Heat to 98°C, allow to cool for 10-20 minutes). **ab199376** - Rabbit monoclonal IgG, is suitable for use as an
ICC/IF		Use at an assay dependent concentration.

Target

Function	Apoptosis-inducing protein that, which can overcome BCL2 suppression. May play a role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2.
Sequence similarities	Belongs to the NIP3 family.
Cellular localization	Mitochondrion. Mitochondrion membrane. Coexpression with the EIB 19-kDa protein results in a shift in NIP3 localization pattern to the nuclear envelope. Colocalizes with ACAA2 in the mitochondria.

Images

Images



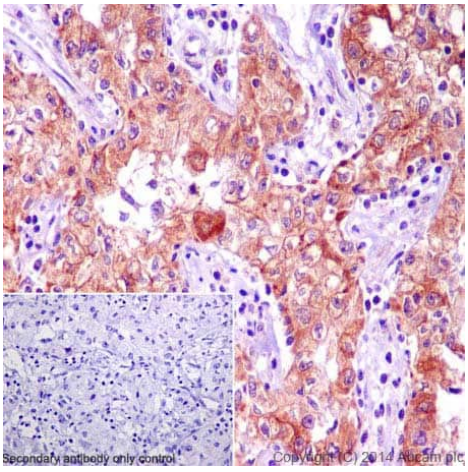
Western blot - Anti-BNIP3 antibody [EPR4034] - BSA and Azide free (ab219609)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109362**).

Lane 1: Wild-type HAP1 whole cell lysate (40 µg)
Lane 2: BNIP3 knockout HAP1 whole cell lysate (40 µg)
Lane 3: SHSY5Y whole cell lysate (40 µg)
Lane 4: A431 whole cell lysate (40 µg)

Lanes 1 - 4: Merged signal (red and green). Green - **ab109362** observed at 25 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

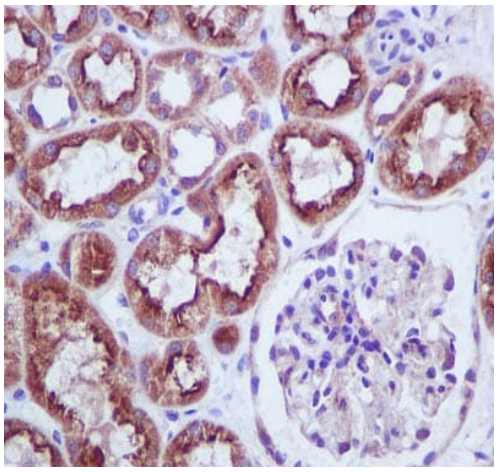
ab109362 was shown to recognize BNIP3 in wild-type HAP1 cells as signal was lost at the expected MW in BNIP3 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and BNIP3 knockout samples were subjected to SDS-PAGE. **ab109362** and **ab9484** (Mouse anti-GAPDH 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BNIP3 antibody [EPR4034] - BSA and Azide free (ab219609)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human renal adenocarcinoma tissue labelling BNIP3 with purified **ab109362** at 1/100. 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109362**).

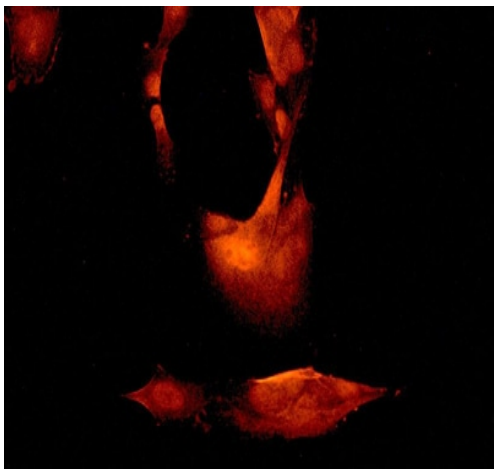


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BNIP3 antibody [EPR4034] - BSA and Azide free (ab219609)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling BNIP3 with unpurified **ab109362** at a 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109362**).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-BNIP3 antibody [EPR4034] - BSA and Azide free (ab219609)

Immunocytochemistry/Immunofluorescence analysis of SH-SY5Y cells labelling BNIP3 with unpurified **ab109362** at a 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109362**).

Anti-BNIP3 antibody [EPR4034] - BSA and Azide free (ab219609)

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