abcam

Product datasheet

Anti-ATF2 antibody [EPR22938-114] - BSA and Azide free ab256820



8 Images

Overview

Product name Anti-ATF2 antibody [EPR22938-114] - BSA and Azide free

Description Rabbit monoclonal [EPR22938-114] to ATF2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IP, IHC-P

Unsuitable for: ChIP or ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: NIH/3T3, RAW 264.7, HEK-293T, K562, PC-12 and Jurkat whole cell lysate. Mouse brain

> tissue lysate. Rat spleen tissue lysate. IHC-P: Human kidney carcinoma tissue. Human, mouse and rat kidney tissue. Flow Cyt (intra): RAW 264.7 and NIH/3T3 cells. IP: NIH/3T3 whole cell

lvsate.

General notes ab256820 is the carrier-free version of ab239361.

> 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 cellbased 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: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number EPR22938-114

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab256820 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 |
|------------------|-----------|---|
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |
| WB | | Use at an assay dependent concentration. |
| IP | | Use at an assay dependent concentration. |
| 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. |

Application notes Is unsuitable for ChIP or ICC/IF.

Target

Function Transcriptional activator, probably constitutive, which binds to the cAMP-responsive element

(CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Interaction with JUN redirects JUN to bind to CRES preferentially over the 12-O-tetradecanoylphorbol-13-acetate response elements (TRES) as part of an ATF2/JUN complex.

Tissue specificity Abundant expression seen in the brain.

Sequence similaritiesBelongs to the bZIP family. ATF subfamily.

Contains 1 bZIP domain.

Contains 1 C2H2-type zinc finger.

Post-translational modifications

Phosphorylation of Thr-69 and Thr-71 by MAPK14 causes increased transcriptional activity. Also

phosphorylated and activated by JNK.

Images



Immunoprecipitation - Anti-ATF2 antibody

[EPR22938-114] - BSA and Azide free (ab256820)

ATF2 was immunoprecipitated from 0.35 mg NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate with <u>ab239361</u> at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using <u>ab239361</u>. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) was used at 1/1000 dilution.

Lane 1: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate 10µg.

Lane 2: ab239361 IP in NIH/3T3 whole cell lysate.

Lane 3: Rabbit monoclonal $\lg G \left(\underline{ab172730} \right)$ instead of $\underline{ab239361}$ in NIH/3T3 whole cell lysate.

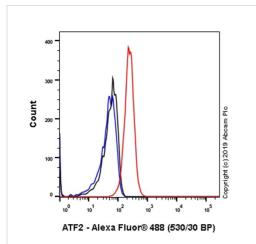
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 8 seconds.

Lysate were made freshly and used in IP test immediately to minimize protein degradation. Incubation time was 2h.

The molecular weight and degraded fragments observed are consistent with what has been described in the literature (PMID: 9488727, PMID: 10207054, PMID:26901653).

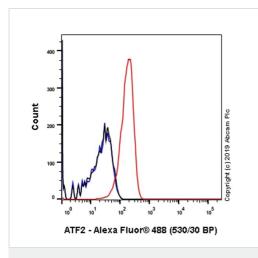
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab239361**).



Flow Cytometry (Intracellular) - Anti-ATF2 antibody [EPR22938-114] - BSA and Azide free (ab256820)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized NIH/3T3 (Mouse embryonic fibroblast) cells labeling ATF2 with ab239361 at 1/40 (Red) compared with a Rabbit monoclonal lgG (ab172730) (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit lgG (Alexa Fluor[®] 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

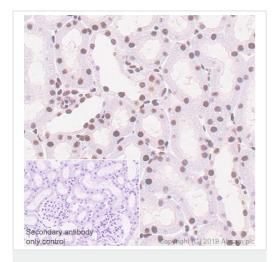
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239361).



Flow Cytometry (Intracellular) - Anti-ATF2 antibody [EPR22938-114] - BSA and Azide free (ab256820)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) cells labeling ATF2 with ab239361 at 1/40 (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239361).



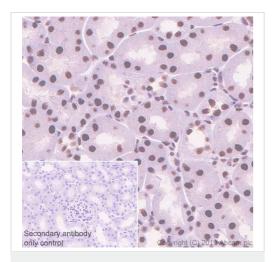
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATF2 antibody

[EPR22938-114] - BSA and Azide free (ab256820)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling ATF2 with <u>ab239361</u> at 1/250 dilution (1.76 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Nuclear staining on rat kidney is observed. The section was incubated with <u>ab239361</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

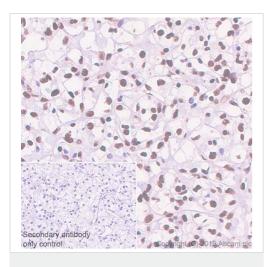
Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239361).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATF2 antibody

[EPR22938-114] - BSA and Azide free (ab256820)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATF2 antibody

[EPR22938-114] - BSA and Azide free (ab256820)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling ATF2 with <u>ab239361</u> at 1/250 dilution (1.76 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Nuclear staining on mouse kidney is observed. The section was incubated with <u>ab239361</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

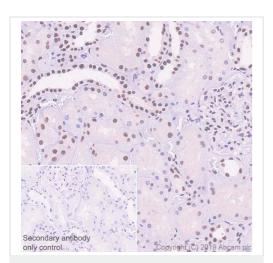
Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239361).

Immunohistochemical analysis of paraffin-embedded Human kidney carcinoma tissue labeling ATF2 with <u>ab239361</u> at 1/250 dilution (1.76 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Nuclear staining on human kidney carcinoma (PMID: 27377902) is observed. The section was incubated with <u>ab239361</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239361).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATF2 antibody

[EPR22938-114] - BSA and Azide free (ab256820)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling ATF2 with <u>ab239361</u> at 1/250 dilution (1.76 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Nuclear staining on human kidney (PMID: 27377902) is observed. The section was incubated with <u>ab239361</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

Secondary antibody only control/ Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239361).



Azide free (ab256820)

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