abcam

Product datasheet

Anti-ATF2 (phospho T71) antibody [E268] - BSA and Azide free ab242381

Recombinant RabMAb

1 References 4 Images

Overview

Product name	Anti-ATF2 (phospho T71) antibody [E268] - BSA and Azide free
Description	Rabbit monoclonal [E268] to ATF2 (phospho T71) - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IP, WB, Dot blot **Unsuitable for:** Flow Cyt or IHC
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP: HeLa treated with 250ng/ml anisomycin for 30min whole cell lysate. ICC/IF: HeLa cells treated with 250ng/ml anisomycin for 30min.
General notes	ab242381 is the carrier-free version of **ab32019**. SAPK and p38 MAPK activate, in response to cellular stress, ATF2 by phosphorylating the protein at Thr69 and Thr71. Mutations of these sites result in the loss of stress induced transcription by ATF2. 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**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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	E268
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab242381 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
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 70 kDa (predicted molecular weight: 54 kDa).
Dot blot		Use at an assay dependent concentration.

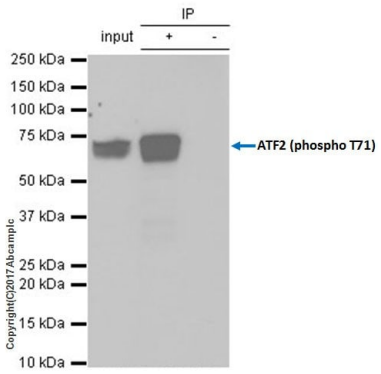
Application notes Is unsuitable for Flow Cyt or IHC.

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 similarities	Belongs 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.
Cellular localization	Nucleus.

Images

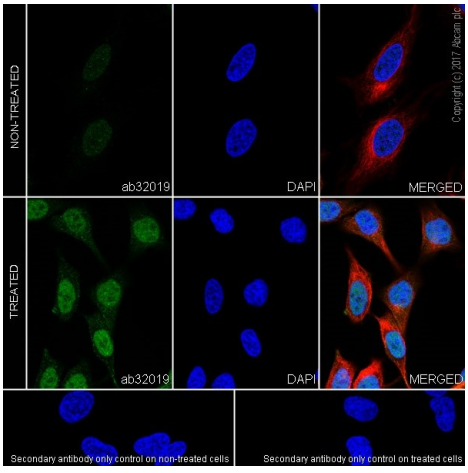


Immunoprecipitation - Anti-ATF2 (phospho T71) antibody [E268] - BSA and Azide free (ab242381)

Lane 1 (input): HeLa (human cervix adenocarcinoma) treated with 250ng/ml anisomycin for 30min whole cell lysate 10µg.
Lane 2 (+): HeLa treated with 250ng/ml anisomycin for 30min whole cell lysate.
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab32019** in HeLa treated with 250ng/ml anisomycin for 30min whole cell lysate.

ab32019 Immunoprecipitating ATF2 in Human Hela whole cell lysate. For western blotting **ab32019** (1:1000) was used to confirm successful immunoprecipitation. Blocking and diluting buffer used was 5% NFDM/TBST.

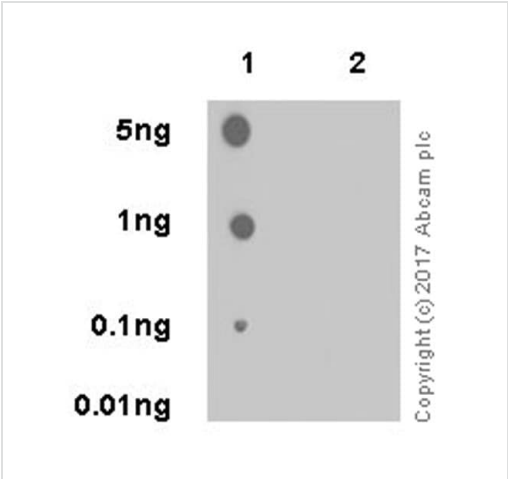
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32019**).



Immunocytochemistry/ Immunofluorescence - Anti-ATF2 (phospho T71) antibody [E268] - BSA and Azide free (ab242381)

Immunocytochemistry of HeLa (Human epithelial cell line from cervix adenocarcinoma), prepared in FBS free medium overnight labeling ATF2 at 0.9 µg/ml. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% tritonX-100. Alexa Fluor® 488 Goat anti-Rabbit (**ab150077**) was used as the secondary antibody at 1/500. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used as the counter stain at 2.5 µg/ml. DAPI was used for nuclear counter stain. Confocal image showing the expression was increased on HeLa cells, prepared in FBS free medium overnight, then treated with 250ng/ml anisomycin for 30min.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32019**).



Dot Blot - Anti-ATF2 (phospho T71) antibody [E268] - BSA and Azide free (ab242381)

Dot blot analysis of human ATF2 (phospho T71) peptide (Lane 1) and human ATF2 non-phospho peptide (Lane 2) using **ab32019** at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution.

Exposure time: 3 minutes

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32019**).

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