

## ATF1 Rabbit mAb

Catalog No: #49239

Package Size: #49239-1 50ul #49239-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

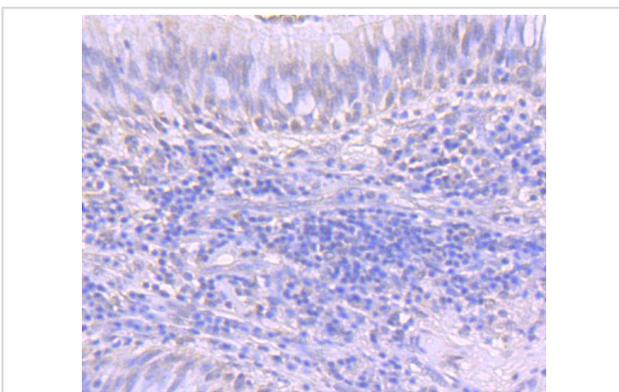
## Description

Product Name	ATF1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JJ207-04
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	Activating transcription factor 1 antibody ATF 1 antibody atf1 antibody ATF1 EWS fusion gene antibody ATF1 FUS fusion gene antibody ATF1_HUMAN antibody cAMP dependent transcription factor 1 antibody cAMP-dependent transcription factor ATF-1 antibody Cyclic AMP dependent transcription factor ATF 1 antibody Cyclic AMP dependent transcription factor ATF1 antibody Cyclic AMP-dependent transcription factor ATF-1 antibody EWS AFT1 antibody FUS ATF 1 antibody FUS/ATF 1 antibody Protein TREB36 antibody RNA binding protein activating transcription factor 1 fusion protein antibody TREB 36 antibody TREB36 antibody TREB36 protein antibody
Accession No.	Swiss-Prot#:P18846
Calculated MW	29 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

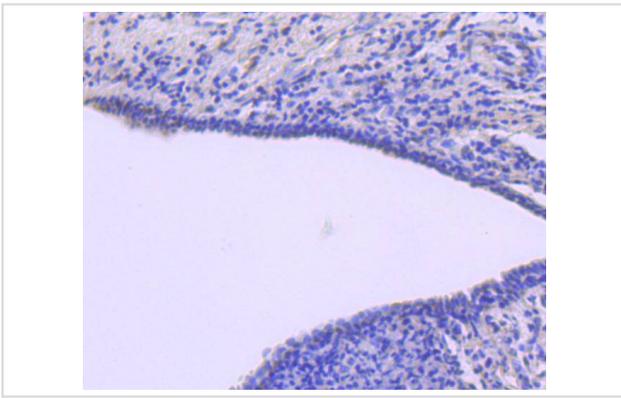
## Application Details

WB: 1:500-1:1,000 IHC: 1:50-1:200 ICC: 1:50-1:200 FC: 1:50-1:100

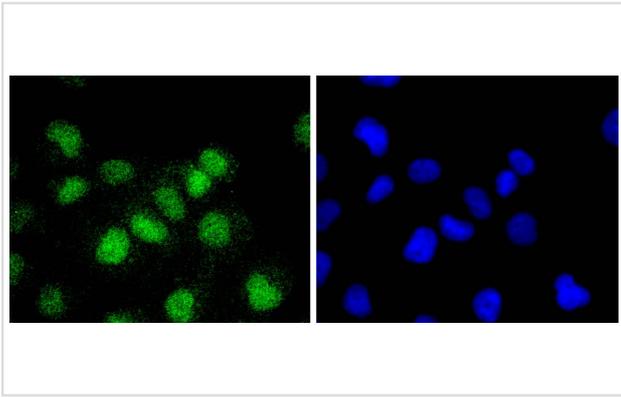
## Images



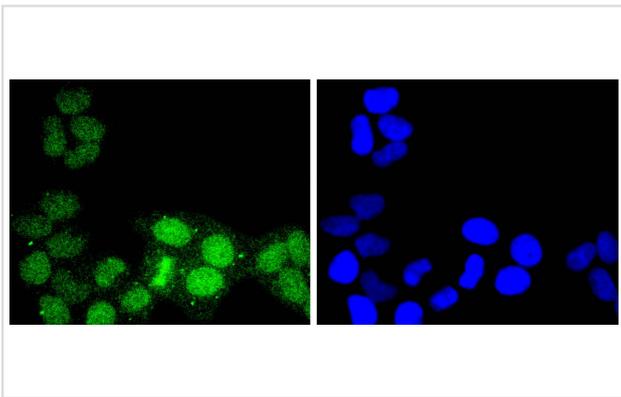
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-ATF1 antibody. Counter stained with hematoxylin.



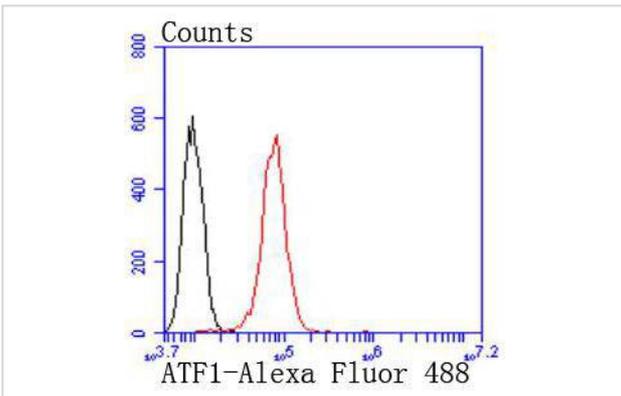
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-ATF1 antibody. Counter stained with hematoxylin.



ICC staining ATF1 in HUVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining ATF1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with ATF1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

## Background

Eukaryotic gene transcription is regulated by sequence-specific transcription factors that bind modular cis acting promoter and enhancer elements. The ATF/ CREB transcription factor family binds the palindromic cAMP response element (CRE) octanucleotide TGACGTCA. The ATF/CREB family includes CREB-1, CREB-2 (also designated ATF-4), ATF-1, ATF-2 and ATF-3. This family of proteins contain highly divergent N-terminal domains, but share a C-terminal leucine zipper for dimerization and DNA binding. ATF-1 is shown to play a key role in the induction of NOX1. ATF-1 binds the cAMP response element (CRE) and mediates PKA-induced stimulation of CRE-reporter genes. ATF-2 forms homodimers and heterodimers with c-Jun to initiate CRE-dependent transcription. Phosphorylation of ATF-2 at Thr 69 and Thr 71 by stress-activated kinases is necessary for transcriptional activation. Myc also induces phosphorylation of ATF-2 at Thr 69 and Thr 71 to prolong the half-life of ATF-2. ATF-2 functions as a histone

acetyltransferase (HAT) and acetylates Histones H2B and H4 specifically in vitro.

## References

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1. Rodriguez P., et al. 2016. cAMP-Induced Histones H3 Dephosphorylation Is Independent of PKA and MAP Kinase Activations and Correlates With mTOR Inactivation. *J. Cell. Biochem.* 117:741-750.
2. Yang S., et al. 2015. The human ATF1 rs11169571 polymorphism increases essential hypertension risk through modifying miRNA binding. *FEBS Lett.* 589:2087-2093.

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.