ATF4 Rabbit mAb

Catalog No: #49147

Package Size: #49147-1 50ul #49147-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

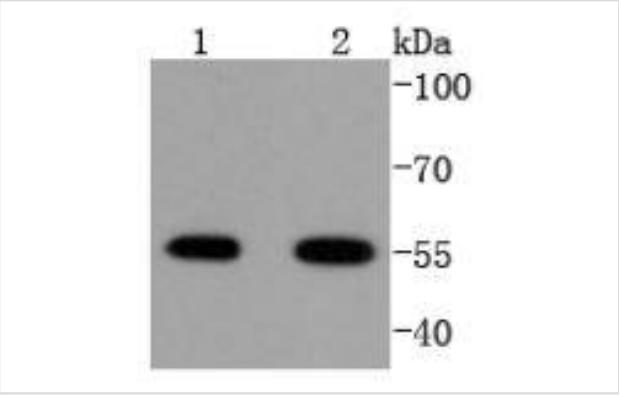
Description

Product Name	ATF4 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SD20-92
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	Activating transcription factor 4 antibody ATF 4 antibody ATF4 antibody ATF4 protein antibody ATF4_HUMAN antibody cAMP-dependent transcription factor ATF-4 antibody cAMP-responsive element-binding protein 2 antibody CREB 2 antibody CREB-2 antibody CREB2 antibody Cyclic AMP dependent transcription factor ATF 4 antibody Cyclic AMP response element binding protein 2 antibody Cyclic AMP-dependent transcription factor ATF-4 antibody Cyclic AMP-responsive element-binding protein 2 antibody DNA binding protein TAXREB67 antibody DNA-binding protein TAXREB67 antibody Tax Responsive Enhancer Element B67 antibody Tax-responsive enhancer element-binding protein 67 antibody TaxREB67 antibody TXREB antibody
Accession No.	Swiss-Prot#:P18848
Calculated MW	39 kDa
SDS-PAGE MW	50 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

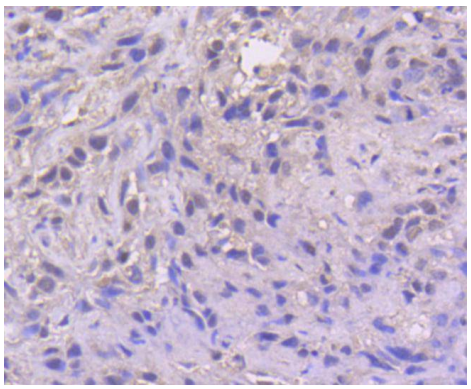
Application Details

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

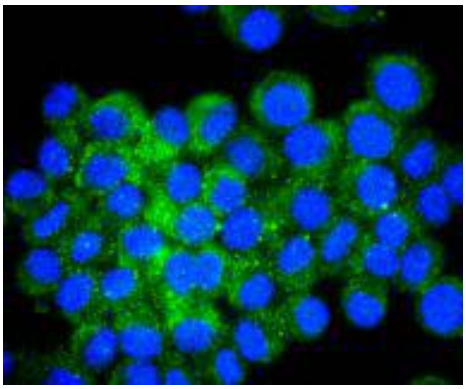
Images



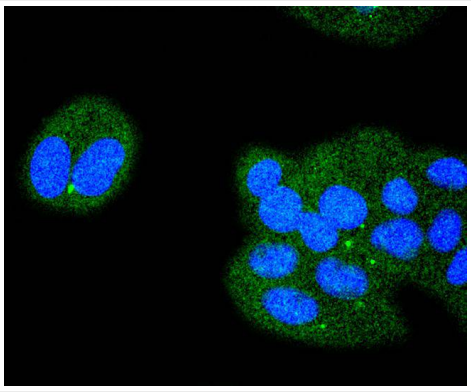
Western blot analysis of ATF4 on different lysates using anti-ATF4 antibody at 1/1,000 dilution. Positive control:
Lane 1: Hela
Lane 2: PC-12



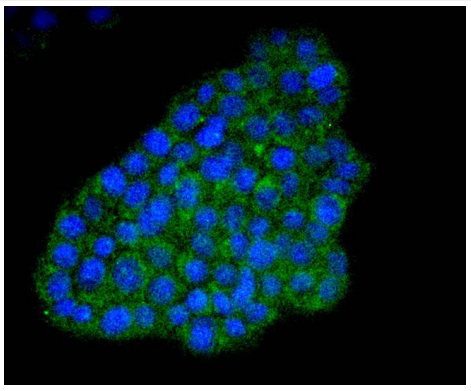
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-ATF4 antibody. Counter stained with hematoxylin.



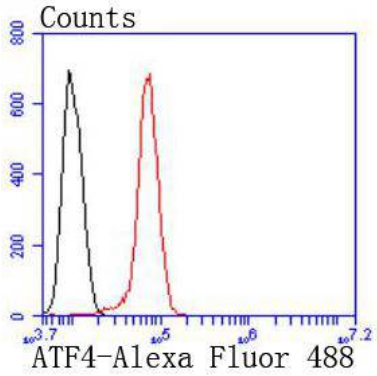
ICC staining ATF4 in N2A cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining ATF4 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining ATF4 in PC-12 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 ATF4 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 which bind modular cis-acting promoter and enhancer elements. The cAMP response element (CRE), one of the best studied of such elements, consists of the palindromic octanucleotide TGACGTCA. Several CRE binding proteins have been identified within the ATF/CREB family, the best characterized of which include CREB-1, CREB-2 (also designated ATF-4), ATF-1, ATF-2 and ATF-3. These proteins share highly related COOH terminal leucine zipper dimerization and basic DNA binding domains but are highly divergent in their amino terminal domains. Although each of the ATF/CREB proteins appear capable of binding CRE in its homodimeric form, certain of these also bind as heterodimers, both within the ATF/CREB family and even with members of the AP-1 transcription factor family.

References

1. Zhu H et al. Activating transcription factor 4 promotes esophageal squamous cell carcinoma invasion and metastasis in mice and is associated with poor prognosis in human patients. PLoS One 9:e103882 (2014).
2. Lenna S et al. HLA-B35 and dsRNA induce endothelin-1 via activation of ATF4 in human microvascular endothelial cells. PLoS One 8:e56123 (2013).

Published Papers

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