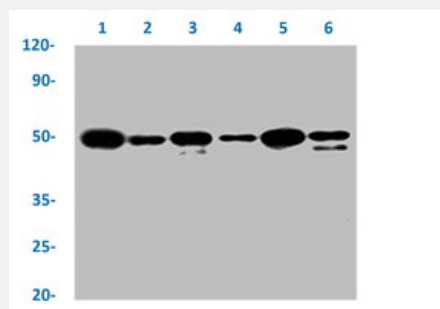


RecomAb™

# ATF4 recombinant monoclonal antibody, clone 9E1

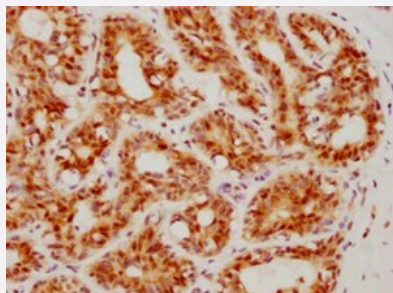
Catalog # RAB04349      Size 100 uL

## Applications



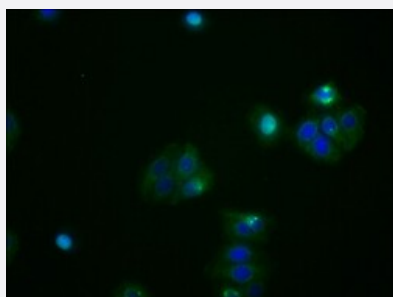
### Western Blot

Western blot analysis of Lane 1: HeLa whole cell lysate, Lane 2: MCF-7 whole cell lysate, Lane 3: 293 whole cell lysate, Lane 4: HepG2 whole cell lysate, Lane 5: Jurkat whole cell lysate and Lane 6: K562 whole cell lysate with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349).



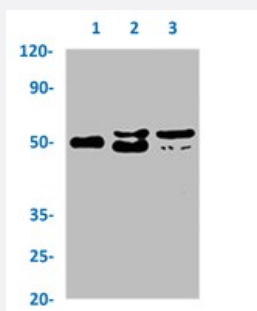
### Immunohistochemistry

Immunohistochemical staining of human breast cancer with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluted at 1:160).



### Immunofluorescence

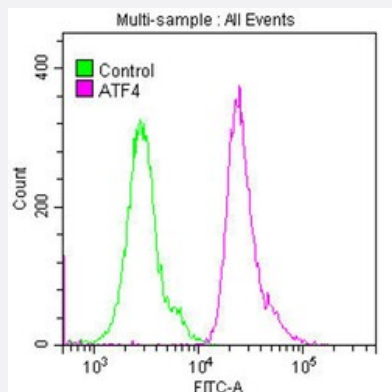
Immunofluorescent staining of HepG2 cells with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluted at 1:32.5). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).



### Immunoprecipitation

Immunoprecipitation analysis of HeLa cell lysate with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349).

Lane 1: rabbit control IgG, Lane 2: RAB04349 precipitates and Lane 3: Input (HeLa whole cell lysate).



## Flow Cytometry

Flow cytometric analysis of HeLa cells with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluted at 1:50; purple line) and negative control (green line).

## Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human ATF4.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human ATF4.
Theoretical MW (kDa)	Calculated MW: 39 kD
Reactivity	Human
Form	Liquid
Purification	Affinity chromatography
Isotype	IgG
Recommend Usage	ELISA Flow Cytometry Immunofluorescence (1:20-1:200) Immunohistochemistry (1:50-1:200) Immunoprecipitation (1:200-1:1000) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot

Western blot analysis of Lane 1: HeLa whole cell lysate, Lane 2: MCF-7 whole cell lysate, Lane 3: 293 whole cell lysate, Lane 4: HepG2 whole cell lysate, Lane 5: Jurkat whole cell lysate and Lane 6: K562 whole cell lysate with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349).

- Immunohistochemistry

Immunohistochemical staining of human breast cancer with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluted at 1:160).

- Immunofluorescence

Immunofluorescent staining of HepG2 cells with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluted at 1:32.5). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

- Immunoprecipitation

Immunoprecipitation analysis of HeLa cell lysate with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349). Lane 1: rabbit control IgG, Lane 2: RAB04349 precipitates and Lane 3: Input (HeLa whole cell lysate).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometric analysis of HeLa cells with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluted at 1:50; purple line) and negative control (green line).

## Gene Info — ATF4

Entrez GeneID [468](#)

Protein Accession# [P18848](#)

Gene Name ATF4

Gene Alias CREB-2, CREB2, TAXREB67, TXREB

Gene Description activating transcription factor 4 (tax-responsive enhancer element B67)

Omim ID [604064](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

This gene encodes a transcription factor that was originally identified as a widely expressed mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV-1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromosome at q28 in a region containing a large inverted duplication. [provided by RefSeq]

**Other Designations**

activating transcription factor 4|cAMP response element-binding protein 2

**Pathway**

- [GnRH signaling pathway](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Prostate cancer](#)

**Disease**

- [Bipolar Disorder](#)
- [Genetic Predisposition to Disease](#)
- [Mental Disorders](#)
- [Neuropsychological Tests](#)
- [Schizophrenia](#)