RecomAb™

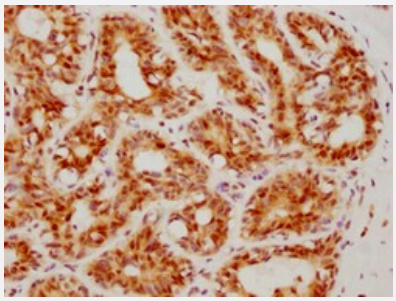
ATF4 recombinant monoclonal antibody, clone 9E1

Catalog # RAB04349 Size 100 uL

Applications

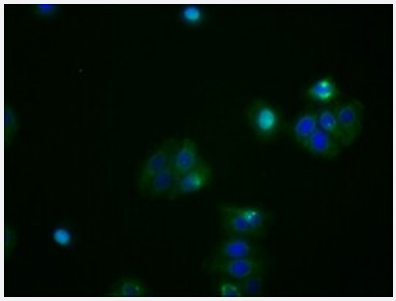
Western Blot

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).



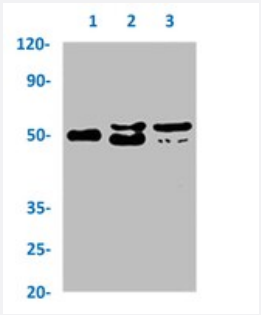
Immunohistochemistry

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



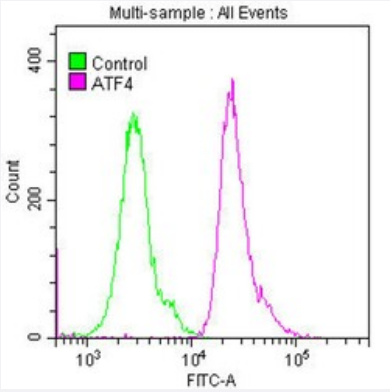
Immunofluorescence

Immunofluorescent staining of HepG2 cells with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluated at 1:32.5). The secondary antibody was Alexa Fluor 488-congugated 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) (diluated 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 shoul d 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) (diluated at 1:160).

- Immunofluorescence

  Immunofluorescent staining of HepG2 cells with ATF4 recombinant monoclonal antibody, clone 9E1 (Cat # RAB04349) (diluated at 1:32.5). The secondary antibody was Alexa Fluor 488-congugated 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) (diluated 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 chromsome 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