

ATF4 recombinant antibody

ATF4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA235524	Rabbit	Human	Immunoprecipitation, Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, Western Blot, ELISA

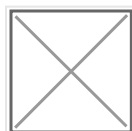
PRODUCT SYNONYMS

ATF4; Monoclonal Recombinant Antibody; ATF4 Antibody; Cyclic AMP-dependent transcription factor ATF-4; cAMP-dependent transcription factor ATF-4; Activating transcription factor 4; Cyclic AMP-responsive element-binding protein 2; CREB-2; cAMP-responsive element-binding protein 2; DNA-binding protein TAXREB67; Tax-responsive enhancer element-binding protein 67; TaxREB67; CREB2; TXREB; ATF4 recombinant antibody

PRODUCT SPECIFICATIONS

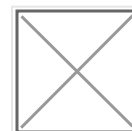
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Purity/Purification	Affinity-Chromatography
Form/Format	Liquid; In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Sequence Length	351
Applicable Applications for ATF4 recombinant antibody	IP (Immunoprecipitation), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from human ATF4
Conjugate	Non-Conjugated
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Overlay histogram showing HeLa cells stained with CSB-RA002272A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4 degree C. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4 degree C. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.



IP (Immunoprecipitation)

Immunoprecipitating ATF4 in HeLa whole cell lysate. Lane 1: Rabbit control IgG instead of CSB-RA002272A0HU in HeLa whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000). Lane 2: CSB-RA002272A0HU (3ug) + HeLa whole cell lysate (500ug). Lane 3: HeLa whole cell lysate (20ug).



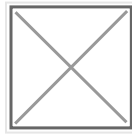
IF (Immunofluorescence)

Immunofluorescence staining of HepG2 cells with CSB-RA002272A0HU at 1:53, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4 degree C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



IHC (Immunohistochemistry)

IHC image of CSB-RA002272A0HU diluted at 1:160 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



WB (Western Blot)

Western Blot Positive WB detected in: HeLa whole cell lysate, MCF-7 whole cell lysate, 293 whole cell lysate, HepG2 whole cell lysate, Jurkat whole cell lysate, K562 whole cell lysate All lanes: ATF4 antibody at 1.6ug/ml Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 39 KDa Observed band size: 50 KDa

ADDITIONAL INFORMATION

Related Product Information for ATF4 recombinant antibody

Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production (By similarity). It binds to a Tax-responsive enhancer element in the long terminal repeat of HTLV-I. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to endoplasmic reticulum (ER) stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. During ER stress response, activates the transcription of NLRP1, possibly in concert with other factors (PubMed:26086088).

Product Categories/Family for ATF4 recombinant antibody

[Recombinant Antibody](#); [Epigenetics and Nuclear Signaling](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	33469976
NCBI GeneID	468
NCBI Accession #	NP_001666.2
NCBI GenBank Nucleotide #	NM_001675.4
UniProt Accession #	P18848 ; Q96AQ3 ; Q9UH31
Molecular Weight	38,590 Da
NCBI Official Full Name	cyclic AMP-dependent transcription factor ATF-4
NCBI Official Synonym Full Names	activating transcription factor 4
NCBI Official Symbol	ATF4
NCBI Official Synonym Symbols	CREB2; TXREB; CREB-2; TAXREB67
NCBI Protein Information	cyclic AMP-dependent transcription factor ATF-4
UniProt Protein Name	Cyclic AMP-dependent transcription factor ATF-4

UniProt Gene Name	ATF4
UniProt Synonym Gene Names	CREB2; TXREB; cAMP-dependent transcription factor ATF-4; CREB-2; cAMP-responsive element-binding protein 2; TaxREB67

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/monoclonal/atf4-recombinant-antibody-immunoprecipitation-flow-cytometry-immunofluorescence-immunohistochemistry-western-blot-elisa/235524>