

Datasheet for ABIN7127347

Recombinant anti-ATF4 antibody**5** Images[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	ATF4
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This ATF4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Flow Cytometry (FACS)

Product Details

Immunogen:	A synthesized peptide derived from human ATF4
Clone:	9E1
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	ATF4
Alternative Name:	ATF4 (ATF4 Products)

Target Details

Background:	<p>Background: 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).</p> <p>Aliases: 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, ATF4, CREB2, TXREB</p>
UniProt:	P18848
Pathways:	Thyroid Hormone Synthesis , Myometrial Relaxation and Contraction , ER-Nucleus Signaling , Unfolded Protein Response

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200, IP:1:200-1:1000,
Restrictions:	For Research Use only

Handling

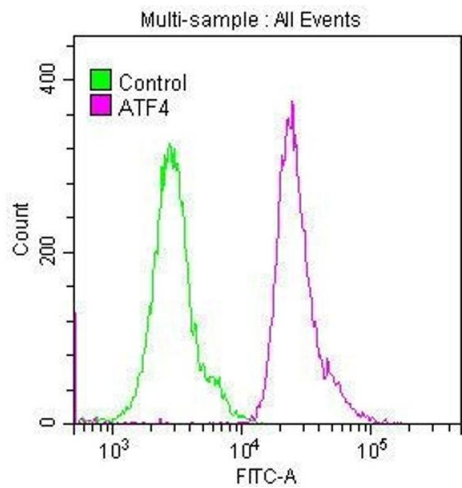
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: -20 °C,-80 °C

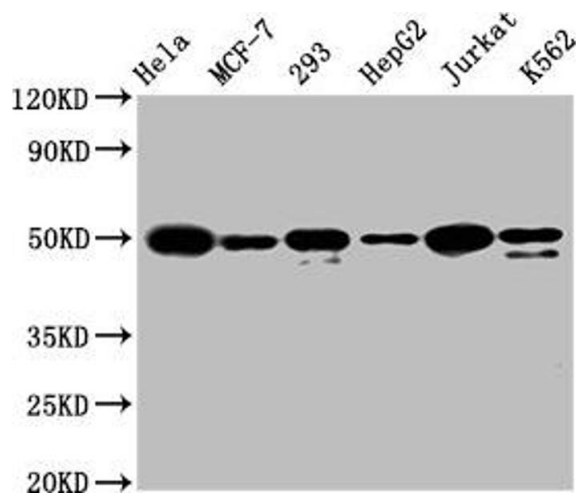
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



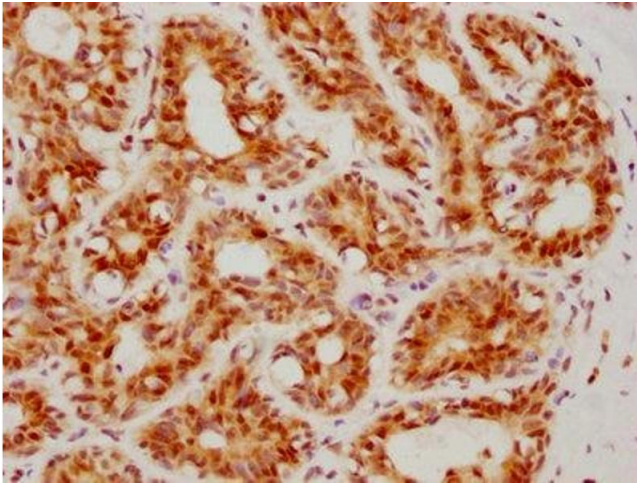
Flow Cytometry

Image 1. Overlay histogram showing HeLa cells stained with ABIN7127347 (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 °C. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4 °C. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.



Western Blotting

Image 2. 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 1.6 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 39 KDa Observed band size: 50 KDa



Immunohistochemistry

Image 3. IHC image of ABIN7127347 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 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN7127347.