

À des fins de recherche uniquement

# Anticorps Polyclonal de lapin anti-ATF4



Numéro de catalogue: 10835-1-AP

Phare

325 Publications

## Informations de base

Numéro de catalogue:  
10835-1-AP

Taille:  
150ul, Concentration: 1000 µg/ml by  
Nanodrop;

Hôte:  
Lapin

Isotype:  
IgG

Immunogen Catalog Number:  
AG1279

Numéro d'acquisition GenBank:  
BC022088

Identification du gène (NCBI):

Nom complet:  
activating transcription factor 4 (tax-  
responsive enhancer element B67)

MW calculé  
39 kDa

MW observés:  
45-50 kDa

Méthode de purification:  
Purification par affinité contre  
l'antigène

Dilutions recommandées:  
WB 1:500-1:1000  
IP 0.5-4.0 ug for IP and 1:200-1:1000  
for WB  
IHC 1:50-1:500  
IF 1:50-1:500

## Applications

Applications testées:  
FC, IF, IHC, IP, WB, ELISA

Demandes citées:  
ChIP, FC, IF, IHC, IP, WB

Spécificité de l'espèce:  
Humain, rat

Espèces citées:  
Humain, poisson-zèbre, porc, rat, Hamster

Contrôles positifs:

WB : cellules A431, cellules HEK-293, tissu cérébral de rat

IP : cellules HEK-293,

IHC : tissu de cancer du sein humain,

IF : cellules HepG2, cellules HeLa traitées à la tunicamycine

**Remarque-IHC: il est suggéré de démasquer l'antigène avec un tampon de TE buffer pH 9,0; (\*) À défaut, 'le démasquage de l'antigène peut être 'effectué avec un tampon citrate pH 6,0.**

## Informations générales

ATF4 is a transcription factor, that accumulates predominantly in osteoblasts, where it regulates terminal osteoblast differentiation and bone formation[PMID: 19016586]. As a basic leucine-zipper (bZip) transcription factor, ATF4 can regulate amino acid metabolism, cellular redox state, and anti-stress responses. It also regulates age-related and diet-induced obesity and glucose homeostasis in mammals, and has conserved metabolic functions in flies[PMID: 19726872]. Due to its location at chromosome 22q13, a region linked to schizophrenia, ATF4 is considered as a positional candidate gene for schizophrenia[PMID: 18163433]. Otherwise, since ATF4 is induced by tumour microenvironmental factors, and regulates processes relevant to cancer progression, it might serve as a potential therapeutic target in cancer. Endogenous ATF4 protein has a molecular mass of 50kd. [PMID: 17726049]. This antibody is a rabbit polyclonal antibody raised against full length human ATF4 antigen. The antibody recognizes the 45-50 kDa ATF4 protein and its phosphorylated forms (50 kDa). ATF4 can bind DNA as a homodimer and as a heterodimer. ATF4 is ubiquitinated by SCF(BTRC) in response to mTORC1 signal, followed by proteasomal degradation and leading to down-regulate expression of SIRT4, so the molecular weight of ATF4 may be 70 kDa.

## Publications notables

Autrice	Pubmed ID	Journal	Application
Theresia Sarabhai	36178534	Diabetologia	WB
Junxia Hu	31580970	Biomed Pharmacother	WB
Jing Sun	34650437	Front Pharmacol	WB

## Stockage

Stockage:

Stocker à -20°C. Stable pendant un an après l'expédition.

Tampon de stockage:

PBS avec azoture de sodium à 0,02 % et glycérol à 50 % pH 7,3

L'aliquotage n'est pas nécessaire pour le stockage à -20°C

\*\*\* Les 20ul contiennent 0,1% de BSA.

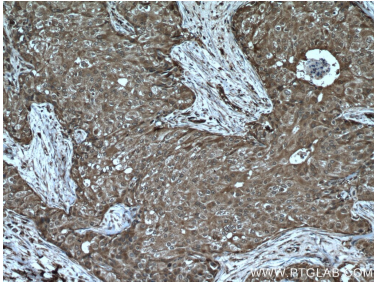
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

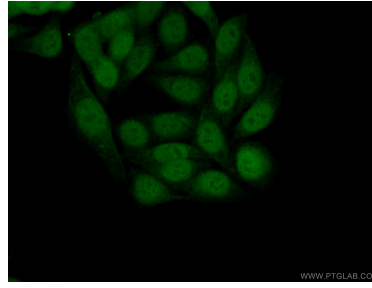
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Données de validation sélectionnées



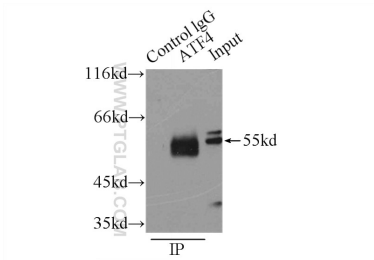
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10835-1-AP (ATF4 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



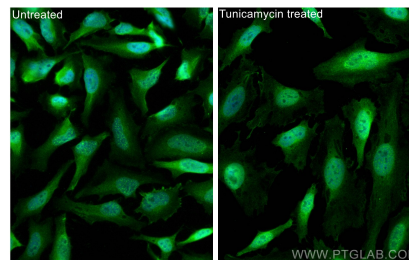
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 10835-1-AP (ATF4 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



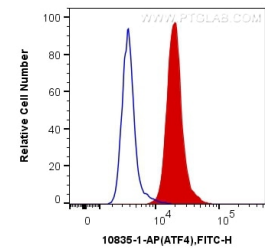
A431 cells were subjected to SDS PAGE followed by western blot with 10835-1-AP (ATF4 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



IP Result of anti-ATF4 (IP:10835-1-AP, 3ug; Detection:10835-1-AP 1:400) with HEK-293 cells lysate 6000ug.



Immunofluorescent analysis of (4% PFA) fixed Tunicamycin treated HeLa cells using ATF4 antibody (10835-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.2 ug Anti-Human ATF4 (10835-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).