

Allgemeine Informationen

Katalog-Nr.: 10835-1-AP	GenBank-Zugangsnummer: BC022088	Reinigungsmethode: Antigen-Affinitätsreinigung
Größe: 150ul , Konzentration: 1000 µg/ml von468 Nanodrop;	GeneID (NCBI): Vollständiger Name: activating transcription factor 4 (tax-responsive enhancer element B67)	Empfohlene Verdünnungen: WB 1:500-1:1000 IP 0.5-4.0 ug für IP und 1:200-1:1000 für WB IHC 1:50-1:500 IF 1:50-1:500
Wirt: Kaninchen	Berechnete Masse: 39 kDa	
Isotyp: IgG	Beobachtete Masse: 45-50 kDa	
Immunogen Katalognummer: AG1279		

Anwendungen

Geprüfte Anwendungen:
FC, IF, IHC, IP, WB, ELISA

In Publikationen genannte Anwendungen:
ChIP, FC, IF, IHC, IP, WB

Getestete Reaktivität:
Human, Ratte

Zitierte Arten:

Hamster, Hausschwein, Human, Ratte, Zebrafisch

Hinweis-IHC: Antigenmaskierung mit TE-Puffer pH 9,0 empfohlen. (*) Wahlweise kann die Antigenmaskierung auch mit Citratpuffer pH 6,0 erfolgen.

Positivkontrollen:

WB: A431-Zellen, HEK-293-Zellen, Rattenhirngewebe

IP: HEK-293-Zellen,

IHC: humanes Mammakarzinomgewebe,

IF: HepG2-Zellen, mit Tunicamycin behandelte HeLa-Zellen

Hintergrundinformationen

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.

Bemerkenswerte Veröffentlichungen

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

Lagerung

Lagerungsbedingungen:

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

Lagerungspuffer:

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

***** 20ul-Größen enthalten 0.1% BSA**

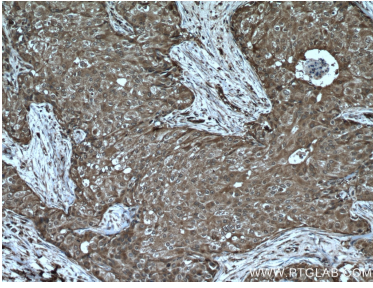
For technical support and original validation data for this product please contact:

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

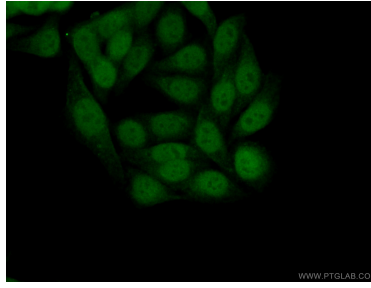
E: proteintech@ptglab.com
W: ptglab.com

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

Ausgewählte Validierungsdaten



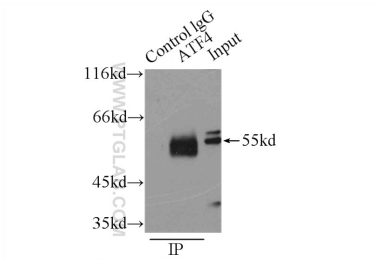
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10835-1-AP (ATF4 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



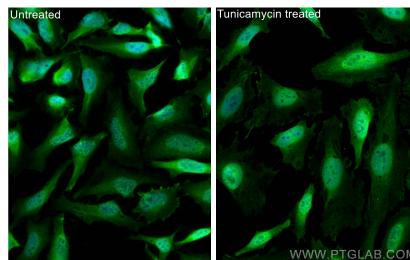
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 10835-1-AP (ATF4 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



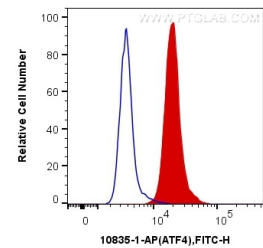
A431 cells were subjected to SDS PAGE followed by western blot with 10835-1-AP (ATF4 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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).



1×10^6 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).