

For Research Use Only

ATF4 Recombinant antibody

Catalog Number: 81798-2-RR



Basic Information

Catalog Number: 81798-2-RR	GenBank Accession Number: BC022088	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 468	CloneNo.: 230306B5
Source: Rabbit	UNIPROT ID: P18848	Recommended Dilutions: WB: 1:1000-1:8000 IF/ICC: 1:200-1:800
Isotype: IgG	Full Name: activating transcription factor 4 (tax-responsive enhancer element B67)	FC (Intra): 0.25 ug per 10 ⁶ cells in a 100 µl suspension
Immunogen Catalog Number: AG1279	Calculated MW: 39 kDa	
	Observed MW: 45-50 kDa	

Applications

Tested Applications: WB, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: human	WB : A549 cells, HEK-293T cells IF/ICC : Tunicamycin treated HeLa cells, FC (Intra) : HEK-293 cells,

Background Information

ATF4 is a transcription factor, that accumulates predominantly in osteoblasts, where it regulates terminal osteoblast differentiation and bone formation. 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. Due to its location at chromosome 22q13, a region linked to schizophrenia, ATF4 is considered as a positional candidate gene for schizophrenia. 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.

Storage

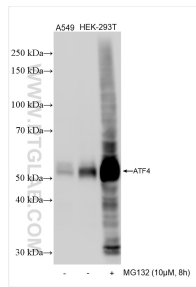
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

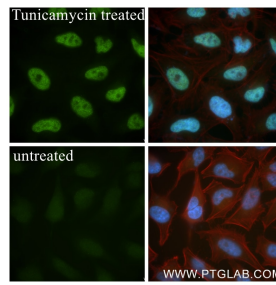
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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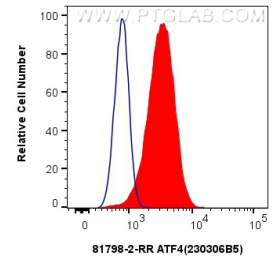
Selected Validation Data



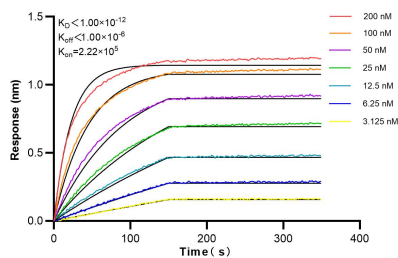
Various lysates were subjected to SDS PAGE followed by western blot with 81798-2-RR (ATF4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed Tunicamycin treated HeLa cells using ATF4 antibody (81798-2-RR, Clone: 230306B5) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10⁶ HEK-293 cells were intracellularly stained with 0.25 ug ATF4 Recombinant antibody (81798-2-RR, Clone:230306B5) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 81798-2-RR against Human ATF4 were performed. The affinity constant is below 1 pM.