

For Research Use Only

# ATF4 Recombinant antibody, PBS Only (Capture)

Catalog Number: 81798-2-PBS



## Basic Information

<b>Catalog Number:</b> 81798-2-PBS	<b>GenBank Accession Number:</b> BC022088	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 468	<b>CloneNo.:</b> 230306B5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P18848	
<b>Isotype:</b> IgG	<b>Full Name:</b> activating transcription factor 4 (tax-responsive enhancer element B67)	
<b>Immunogen Catalog Number:</b> AG1279	<b>Calculated MW:</b> 39 kDa	
	<b>Observed MW:</b> 45-50 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## 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 -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
100% PBS pH 7.3

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

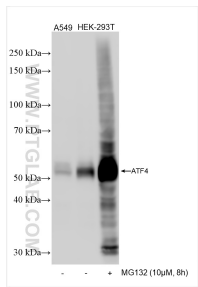
T: 4006900926

E: Proteintech-CN@ptglab.com

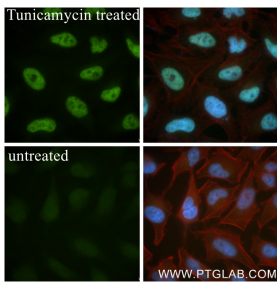
W: ptgcn.com

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

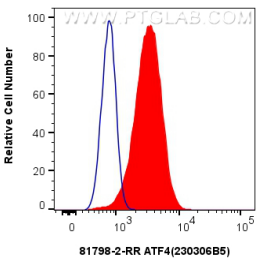
Selected Validation Data



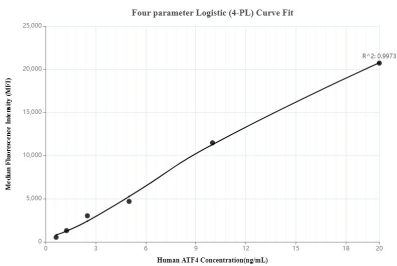
Various lysates were subjected to SDS PAGE followed by western blot with 81798-2-RR (ATF4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81798-2-PBS in a different storage buffer formulation.



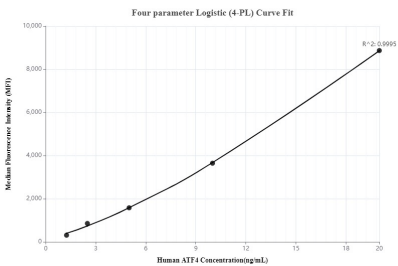
Immunofluorescent analysis of (4% PFA) fixed Tunicamycin treated HeLa cells using ATF4 antibody (81798-2-RR, Clone: 230306B5 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 81798-2-PBS in a different storage buffer formulation.



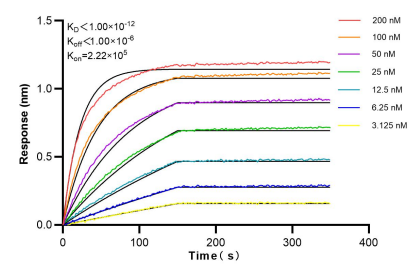
1x10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.25 ug ATF4 Recombinant antibody (81798-2-RR, Clone:230306B5) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 81798-2-PBS in a



Cytometric bead array standard curve of MP00113-1, ATF4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 81798-2-PBS. Detection antibody: 81798-5-PBS. Standard: Ag1279. Range: 0.625-20 ng/mL



Cytometric bead array standard curve of MP00113-3, ATF4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 81798-2-PBS. Detection antibody: 81798-4-PBS. Standard: Ag1279. Range: 1.25-20 ng/mL



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