

For Research Use Only

ATF4 Recombinant antibody

Catalog Number: 81798-2-RR



Basic Information

Catalog Number:

81798-2-RR

Size:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1279

GenBank Accession Number:

BC022088

GeneID (NCBI):

468

UNIPROT ID:

P18848

Full Name:

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

Calculated MW:

39 kDa

Observed MW:

45-50 kDa

Purification Method:

Protein A purification

CloneNo.:

230306B5

Recommended Dilutions:

WB 1:1000-1:8000

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB : A549 cells, HEK-293T cells

IF/ICC : Tunicamycin treated HeLa 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

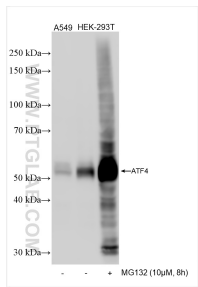
T: 4006900926

E: Proteintech-CN@ptglab.com

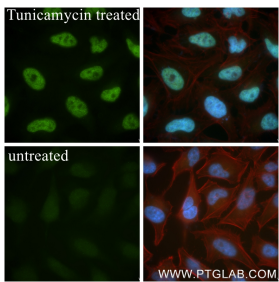
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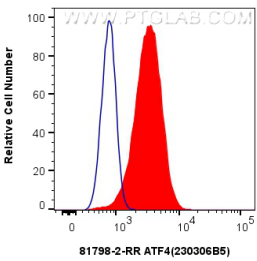
Selected Validation Data



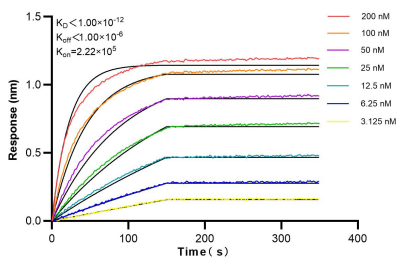
Various lysates were subjected to SDS PAGE followed by western blot with 81798-2-RR (ATF4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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.