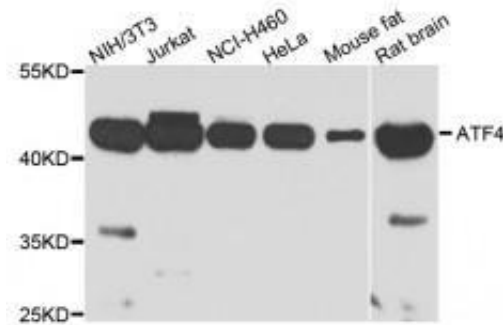


## ATF4 antibody

Cat# NB-22-18091 (100 ul)



Western blot analysis of extract of various cells, using ATF4 antibody.

### Description

ATF4 antibody

### Product Information

<b>Code</b>	NB-22-18091
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human, Mouse, Rat
<b>Applications</b>	WB, IHC
<b>Immunogen</b>	Recombinant peptide derived from human ATF4
<b>Gene ID</b>	468 (Human)
<b>Dilution range</b>	WB 1:500-1:2000 / IHC 1:50-1:200
<b>Purification</b>	Anti-ATF4 antibody was affinity purified using immunizing peptide
<b>Protein Name</b>	ATF4 - Cyclic AMP-dependent transcription factor ATF-4 - ATF4 - TAXREB67 - CREB-2 - TXREB - activating transcription factor 4
<b>Clonality</b>	Polyclonal
<b>Conjugation</b>	Unconjugated
<b>Isotype</b>	IgG

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<b>Formulation</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.4
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.

## Target

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**Database Links** Human Entrez Gene: [468](#).  
Human Uniprot/Swiss-Prot: [P18848](#)  
Mouse Entrez Gene: [11911](#)  
2Mouse Uniprot/Swiss-Prot: [Q06507](#)  
Rat Entrez Gene: [79255](#)  
Rat Uniprot-Swiss-Prot: [Q9ES19](#)

**Alternative Names** ATF4 / activating transcription factor 4 / activating transcription factor 4 (1) antibody / activating transcription factor 4a antibody / activating transcription factor 4 (tax-responsive enhancer element B67) antibody / activating transcription factor ATF-4 antibody / AS27\_07890 antibody / AS28\_12494 antibody / Atf-4 antibody / ATF4-1 antibody / atf4-a antibody / ATF4A antibody / atf4-b antibody / cAMP-dependent transcription factor ATF-4 antibody / cAMP response element-binding protein 2 antibody / cAMP-responsive element-binding protein 2 antibody / C /ATF antibody / CB1\_000240004 antibody / c /EBP-related ATF antibody / creb2 antibody / CREB-2 antibody / Cyclic AMP-dependent transcription factor ATF-4 antibody / cyclic AMP-responsive element-binding protein 2 antibody / D623\_10014009 antibody / DNA-binding protein TAXREB67 antibody / GW7\_02603 antibody / H920\_01884 antibody / M959\_11474 antibody / Mgat3 antibody / N300\_11560 antibody / N301\_08769 antibody / N302\_12731 antibody / N303\_02860 antibody / N305\_14004 antibody / N306\_07357 antibody / N307\_05092 antibody / N308\_03295 antibody / N311\_09674 antibody / N312\_04214 antibody / N320\_10777 antibody / N321\_11202 antibody / N324\_09876 antibody / N325\_04153 antibody / N327\_08871 antibody / N328\_06905 antibody / N329\_05516 antibody / N330\_00815 antibody / N331\_00267 antibody / N332\_09326 antibody / N333\_08714 antibody / N334\_08958 antibody / N335\_04761 antibody / N336\_01846 antibody / N339\_08332 antibody / N340\_07125 antibody / N341\_09032 antibody / PAL\_GLEAN10007264 antibody / PANDA\_002535 antibody / putative activating transcription factor 4 variant 3 antibody / rATF-4 antibody / taxreb67 antibody / taxREB67 homolog antibody / tax-responsive enhancer element B67 antibody / tax-responsive enhancer element-binding protein 67 antibody / tax-responsive enhancer element-binding protein 67 homolog antibody / TREES\_T100011993 antibody / TXREB antibody / UY3\_00867 antibody / Y1Q\_013556 antibody / Y956\_01232 antibody / Z169\_12058 antibody Function Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5'-GTGACGT [AC] [AG]-3'), a sequence present in

many viral and cellular promoters. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production (By similarity). It binds to a Tax-responsive enhancer element in the long terminal repeat of HTLV-I. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to endoplasmic reticulum (ER) stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. During ER stress response, activates the transcription of NLRP1, possibly in concert with other factors.

## **Sequence and Domain Family**

The BetaTrCP degron motif promotes binding to BTRC when phosphorylated.

## **Post-translational Modifications**

Ubiquitinated by SCF (BTRC) in response to mTORC1 signal, followed by proteasomal degradation and leading to down-regulate expression of SIRT4. ; Phosphorylated by NEK6 (By similarity). Phosphorylated on the betaTrCP degron motif at Ser-219, followed by phosphorylation at Thr-213, Ser-224, Ser-231, Ser-235 and Ser-248, promoting interaction with BTRC and ubiquitination. Phosphorylation is promoted by mTORC1 (By similarity). ; Phosphorylated by NEK6.

## **Cellular Localization**

Cytoplasm Cell membrane Nucleus Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Colocalizes with GABBR1 in hippocampal neuron dendritic membranes (By similarity). Colocalizes with NEK6 at the centrosome.

***For reference only***

***For Research Use Only. Not for Diagnostic or Therapeutic Use.***