

#11053

## ATF4 (Phospho-Ser245) Antibody

**Catalog:** #11053-1 50µl **Orders:** [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
#11053-2 100µl **Support:** [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)  
**Storage:** Store at -20°C/1 year **Web:** [www.signalwayantibody.com](http://www.signalwayantibody.com)



Application	Species Reactivity	Source	Molecular Wt.
IHC WB	Human	Rabbit Polyconal Ab	45KD

**Description:** Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

**Specificity:** The antibody detects endogenous level of ATF4 only when phosphorylated at serine 245.

**Immunogen:** Peptide sequence around phosphorylation site of serine 245 (N-R-S(p)-L-P) derived from Human ATF4.

**Formulation:** Supplied at 1.0mg/mL in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Synonyms:** C/ATF C/EBP-related ATF CREB2

**Accession No.:** Swiss-Prot#: P18848 NCBI Gene#: 468  
NCBI Protein#: NP\_001666.2

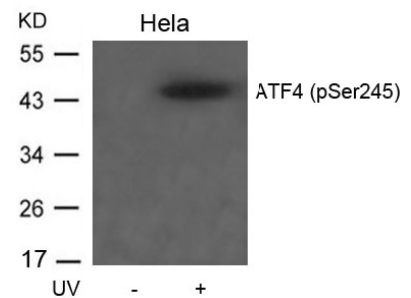
**Background:** ATF4 encodes a transcription factor that was originally identified as a widely expressed mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV-1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromosome at q28 in a region containing a large inverted duplication.

### References:

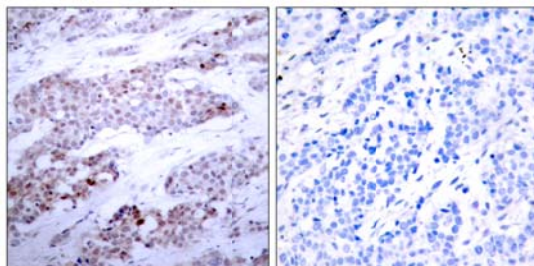
Yang X, et al. (2004). Cell.117(3): 387-398.

### Recommended Dilutions:

Western blotting 1:500~1:1000  
Immunohistochemistry 1:50~1:100



Western blot analysis of extracts from HeLa cells untreated or treated with UV using ATF4 (Phospho-Ser245) Antibody #11053.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF4 (Phospho-Ser245) Antibody #11053 (left) or the same antibody preincubated with blocking peptide (right).

### Citation:

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**Related Pathway:** MAPK, Chromatin/Transcription

**Note:** For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

This product is for in vitro research use only and is not intended for use in humans or animals.