



## Phospho-ATF2 Sampler Kit

E051042

Kits Includes	Cat.	Quantity	Application	Reactivity	Source
ATF2 (Phospho-Ser62 or 44) Antibody	E011029-1	50µg/50µl	IHC	Human, Mouse, Rat	Rabbit
ATF2 (Phospho-Thr69 or 51) Antibody	E011030-1	50µg/50µl	IHC, IF	Human, Mouse, Rat	Rabbit
ATF2 (Phospho-Thr71 or 53) Antibody	E011031-1	50µg/50µl	IHC, WB	Human, Mouse, Rat	Rabbit
ATF2 (Phospho-Thr73 or 55) Antibody	E011032-1	50µg/50µl	IHC, IF	Human, Mouse, Rat	Rabbit
ATF2 (Phospho-Ser112 or 94) Antibody	E011033-1	50µg/50µl	IHC	Human, Mouse, Rat	Rabbit

**ATF2** gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds to the cAMP-responsive element (CRE), an octameric palindrome. The protein forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent transcription. The protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 in vitro; thus it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components. Additional transcript variants have been identified but their biological validity has not been determined. Transcriptional activator, probably constitutive, which binds to the cAMP-responsive element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Interaction with JUN redirects JUN to bind to CRES preferentially over the 12-O-tetradecanoylphorbol-13-acetate response elements (TRES) as part of an **ATF2**-c-Jun complex. Phosphorylation of Thr-69 and Thr-71 by MAPK14 causes increased transcriptional activity. Also phosphorylated and activated by JNK.



## ATF-2 (Phospho-Ser62 or 44) Antibody

E011029

**Catalog Number:** E011029-1, E011029-2

**Amount:** 50µg/50µl, 100µg/100µl

**Form of Antibody:** Rabbit IgG 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.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human ATF-2 around the phosphorylation site of serine 62 or 44 (N-D-S<sup>P</sup>-V-I).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Specificity/Sensitivity:** ATF-2 (phospho-Ser62 or 44) antibody detects endogenous levels of ATF-2 only when phosphorylated at serine 62 or 44.

**Reactivity:** Human, Mouse, Rat

**Applications:** IHC: 1:50~1:100

**Swiss-Prot No.:** P15336

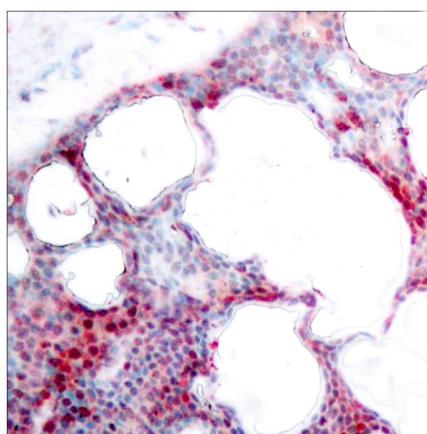
**References:** Sevilla A, et al. (2004) J Biol Chem. 279(26):27458-27465.

Sakurai A, et al. (1991) Biochem Biophys Res Commun. 181(2): 629-635.

Abdel-Hafiz H A, et al. (1992) Mol Endocrinol. 6: 2079-2089.

Gupta S, et al. (1995) Science. 267: 389-393.

Van Dam H, et al. (1995) EMBO J. 14(8): 1798-1811.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF-2 (phospho-Ser62 or 44) antibody (E011029).



## ATF-2(Phospho-Thr69 or 51) Antibody

E011030

**Catalog Number:** E011030-1, E011030-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Form of Antibody:** Rabbit IgG 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.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human ATF-2 around the phosphorylation site of threonine 69 or 51 (D-Q-T<sup>P</sup>-P-T).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Specificity/Sensitivity:** ATF-2 (phospho-Thr69or51) antibody detects endogenous levels of ATF-2 only when phosphorylated at threonine 69 or 51.

**Reactivity:** Human, Mouse, Rat

**Applications:** IHC: 1:50~1:100     IF: 1:100~1:200

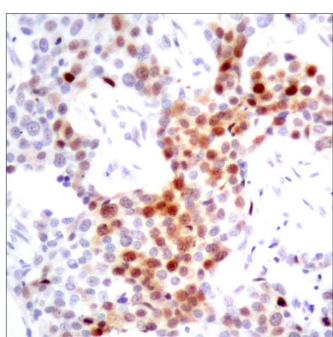
**Swiss-Prot No.:** P15336

**References:** Sevilla A, et al. (2004) J Biol Chem. 279(26):27458-27465.

Alsayed Y, et al. (2001) J Biol Chem. 276(6): 4012-4019.

Abdel-Hafiz H A, et al. (1992) Mol Endocrinol. 6: 2079-2089.

Gupta S, et al. (1995) Science. 267: 389-393.

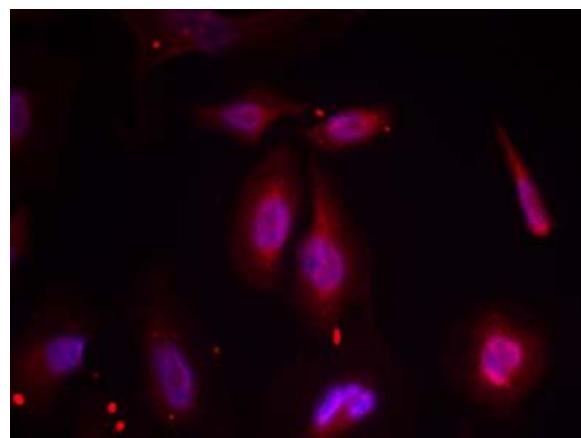


P-Peptide

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Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF-2 (phospho-Thr69 or 51) antibody (E011030).



Immunofluorescence staining of methanol-fixed HeLa cells using ATF-2 (phospho-Thr69 or 51) antibody (E011030, Red).



## ATF-2 (Phospho-Thr71 or 53) Antibody

E011031

**Catalog Number:** E011031-1, E011031-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Form of Antibody:** Rabbit IgG 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.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human ATF-2 around the phosphorylation site of threonine 71 or 53 (T-P-T<sup>P</sup>-P-T).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Specificity/Sensitivity:** ATF-2 (phospho-Thr71 or 53) antibody detects endogenous levels of ATF-2 only when phosphorylated at threonine 71 or 53.

**Reactivity:** Human, Mouse, Rat

**Applications:** WB: 1:500~1:1000 IHC: 1:50~1:100

**Swiss-Prot No.:** P15336

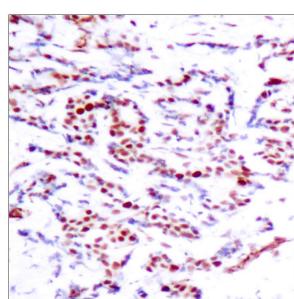
**References:** Sevilla A, et al. (2004) J Biol Chem. 279(26):27458-27465.

Waetzig G H, et al. (2002) J Immunol. 168(10): 5342-5351.

Abdel-Hafiz H A, et al. (1992) Mol Endocrinol. 6: 2079-2089.

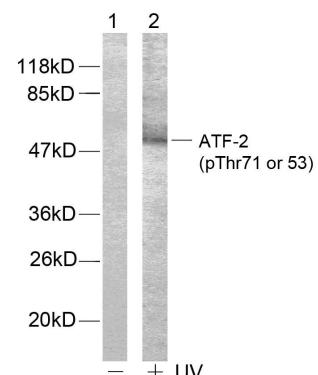
Gupta S, et al. (1995) Science. 267: 389-393.

Van Dam H, et al. (1995) EMBO J. 14(8): 1798-1811.



P-Peptide - +

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF-2 (phospho-Thr71 or 53) antibody (E011031).



Western blot analysis of extract from HeLa cells, using ATF-2 (phospho-Thr71 or 53) antibody (E011031).



## ATF-2 (Phospho-Thr73 or 55) Antibody

E011032

**Catalog Number:** E011032-1, E011032-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Form of Antibody:** Rabbit IgG 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.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human ATF-2 around the phosphorylation site of threonine 73 or 55 (T-P-T<sup>P</sup>-R-F).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Specificity/Sensitivity:** ATF-2 (phospho-Thr73 or 55) antibody detects endogenous levels of ATF-2 only when phosphorylated at threonine 73 or 55.

**Reactivity:** Human, Mouse, Rat

**Applications:** IHC: 1:50~1:100 IF:1:100~1:200

**Swiss-Prot No.:** P15336

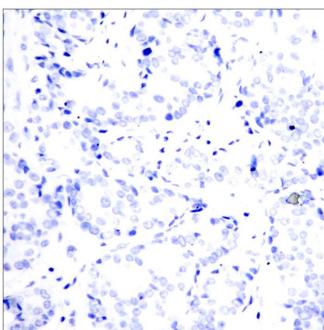
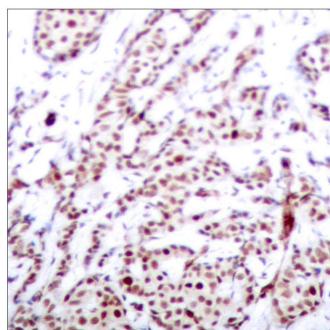
**References:** Beausoleil S A, et al. (2004) Proc Natl Acad Sci U S A. 101(33): 12130-12135.

Abdel-Hafiz H A, et al. (1992) Mol Endocrinol. 6: 2079-2089.

Gupta S, et al. (1995) Science. 267: 389-393.

Van Dam H, et al. (1995) EMBO J. 14(8): 1798-1811.

Livingstone C, et al. (1995) EMBO J. 14: 1785-1797.

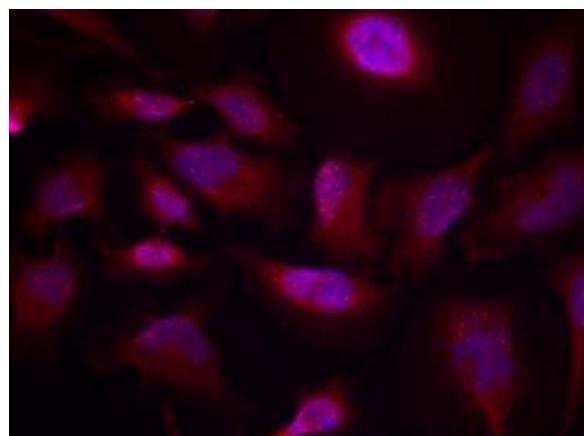


P-Peptide

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Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF-2 (phospho-Thr73 or 55) antibody (E011032).



Immunofluorescence staining of methanol-fixed HeLa cells using ATF-2 (phospho-Thr73 or 55) antibody (E011032, Red).



## ATF-2 (Phospho-Ser112 or 94) Antibody

E011033

**Catalog Number:** E011033-1, E011033-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Form of Antibody:** Rabbit IgG 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.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human ATF-2 around the phosphorylation site of serine 112 or 94 (D-L-S<sup>P</sup>-P-L).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Specificity/Sensitivity:** ATF-2 (phospho-Ser112 or 94) antibody detects endogenous levels of ATF-2 only when phosphorylated at serine 112 or 94.

**Reactivity:** Human, Mouse, Rat

**Applications:** IHC: 1:50~1:100

**Swiss-Prot No.:** P15336

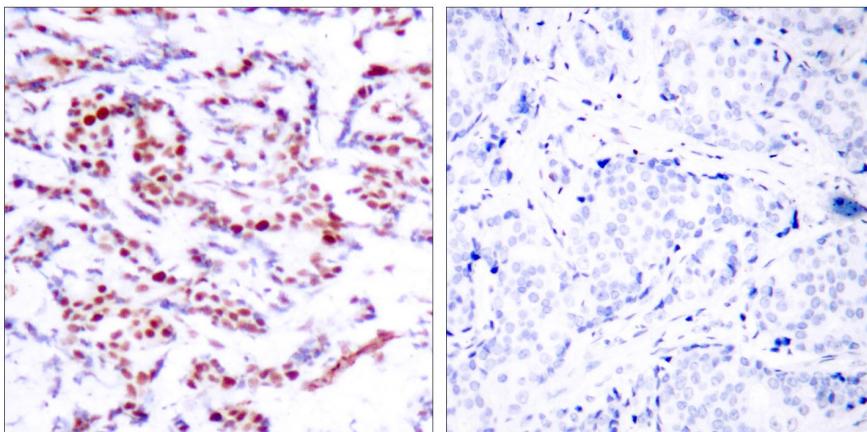
**References:** Beausoleil S A, et al. (2004) Proc Natl Acad Sci U S A. 101(33): 12130-12135.

Abdel-Hafiz H A, et al. (1992) Mol Endocrinol. 6: 2079-2089.

Gupta S, et al. (1995) Science. 267: 389-393.

van Dam H, et al. (1995) EMBO J. 14(8): 1798-1811.

Livingstone C, et al. (1995) EMBO J. 14: 1785-1797.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATF-2 (phospho-Ser112 or 94) antibody (E011033).