## bs-0518R

## [ Primary Antibody ]

www.bioss.com.cn sales@bioss.com.cn techsupport@bioss.com.cn 400-901-9800

# ATF2 Rabbit pAb

DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**GenelD: 1386 SWISS:** P15336

Target: ATF2

Immunogen: KLH conjugated synthetic peptide derived from human ATF2:

188-255/505.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

**Background:** ATF2 is a member of the ATF/CREB family of basic region leucine zipper DNA binding proteins that regulates transcription by binding to a consensus cAMP response element (CRE) in the promoter of various viral and cellular genes. Many of these genes are important in cell growth and differentiation, and in stress and immune responses. ATF2 is a nuclear protein that binds DNA as a dimer and can form dimers with members of the ATF/CREB and Jun/Fos families. It is a stronger activator as a heterodimer with cJun than as a homodimer. Several isoforms of ATF2 arise by differential splicing. The stable native full length ATF2 is transcriptionally inactive as a result of an inhibitory direct intramolecular interaction of its carboxy terminal DNA binding domain with the amino terminal transactivation domain. Following dimerization ATF2 becomes a short lived protein that undergoes ubiquitination and proteolysis, seemingly in a protein phosphatase-dependent mechanism. Stimulation of the transcriptional activity of ATF2 occurs following cellular stress induced by several genotoxic agents, inflammatory cytokines, and UV irradiation. This activation requires phosphorylation of two threonine residues in ATF2 by both JNK/SAP kinase and p38 MAP kinase. ATF2 is abundantly expressed in brain.

Applications: IHC-P (1:100-500)

IHC-F (1:100-500) **IF** (1:100-500) ICC/IF (1:200)

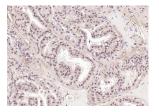
Reactivity: Human, Mouse, Rat

(predicted: Cow)

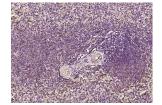
Predicted 55 kDa MW.:

Subcellular Nucleus Location:

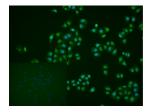
## **VALIDATION IMAGES**



Paraformaldehyde-fixed, paraffin embedded (mouse prostate); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (ATF2) Polyclonal Antibody, Unconjugated (bs-0518R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human spleen); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (ATF2) Polyclonal Antibody, Unconjugated (bs-0518R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



4% Paraformaldehyde-fixed Hela (H) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with (ATF2) polyclonal Antibody, unconjugated (bs-0518R) 1:200, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-60295G-FITC) at 37°C for 90 min, DAPI (blue, C02-04002) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.

## - SELECTED CITATIONS -

- [IF=2.08] Zhang, Jihong, et al. "Interleukin 18 augments growth ability via NF-kB and p38/ATF2 pathways by targeting cylin B1, cyclin B2, cylin A2, and Bcl-2 in BRL-3A rat liver cells." Gene (2015). WB;="Rat". 25752290
- [IF=1.922] Luo et al. Silencing activating transcription factor 2 promotes the anticancer activity of sorafenib in hepatocellular carcinoma cells. (2018) Mol.Med.Rep. 17:8053-8060 WB; Human. 29693700