bsm-52134R **[Primary Antibody]**

phospho-ATF2 (Thr71) Recombinant Rabbit mAb

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

DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 7B1
GeneID: 1386
SWISS: P15336
Target: phospho-ATF2 (Thr71)
Immunogen: KLH conjugated synthesised phosphopeptide derived from human ATF2 around the phosphorylation site of Thr71: TP(p-T)PT.
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.

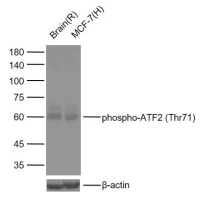
Applications: **WB** (1:500-1000)
IHC-P (1:50-200)
IHC-F (1:50-200)
IF (1:50-200)
ICC/IF (1:50-200)

Reactivity: Human, Mouse, Rat

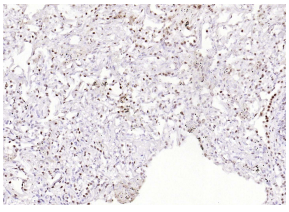
Predicted MW.: 54 kDa

Subcellular Location: Nucleus

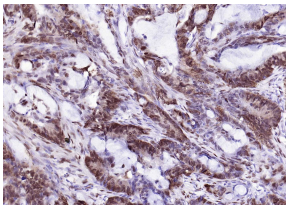
VALIDATION IMAGES



Sample: Lane 1: Rat Brain lysates Lane 2: Human MCF-7 cell lysates Primary: Anti-phospho-ATF2 (Thr71) (bsm-52134R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 54 kDa Observed band size: 60 kDa



Paraformaldehyde-fixed, paraffin embedded (human breast carcinoma); 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; Antibody incubation with (phospho-ATF2 (Thr71)) Monoclonal Antibody, Unconjugated (bsm-52134R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); 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; Antibody incubation with (phospho-ATF2 (Thr71)) Monoclonal Antibody, Unconjugated (bsm-52134R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

SELECTED CITATIONS

- **[IF=5.295]** Yue-hua Liu. et al. ANKRD49 promotes the invasion and metastasis of lung adenocarcinoma via a P38/ATF-2 signalling pathway. JOURNAL OF CELLULAR AND MOLECULAR MEDICINE. 2022 Jun 30 IHC,WB ;Human. 35775112