**bs-0036R** **[ Primary Antibody ]**

# phospho-CREB-1 (Ser133) Rabbit pAb

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

## DATASHEET

**Host:** Rabbit **Isotype:** IgG

**Clonality:** Polyclonal

**GeneID:** 1385 **SWISS:** P16220

**Target:** CREB-1 (Ser133)

**Immunogen:** KLH conjugated Synthesised phosphopeptide derived from human CREB-1 around the phosphorylation site of Ser133: RP(p-S)YR.

**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:** The ATF/CREB family consists of transcription factors that function through binding to the cAMP responsive element (CRE) palindromic octanucleotide, TGACCTCA. The best characterized members of this gene family include CREB-1, CREB-2, ATF-1,ATF-2,ATF-3and ATF-4. these transcription factors share highly-related COOH terminal leucine zipper demerization and basic DNA bindings but are highly divergent in their amino terminal domains. Although each of the ATF/CREB proteins bind CREs in their homodimeric form, in cerain instances they also bind as heterodimers, both within the ATF/CREB family and with members of the AP-1 transcription factor family. It has recentlybeen shown that protein kinase A-mediated CREB phosphorylation results in its binding to a 265kDa nuclear protein designated CBP (CREB-binding protein), which may reprecent a CREB co-activator.

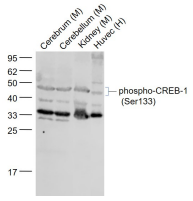
**Applications:** **WB** (1:500-2000)
**IHC-P** (1:100-500)
**IHC-F** (1:100-500)
**IF** (1:100-500)
**Flow-Cyt** (1μg/Test)

**Reactivity:** Human, Mouse, Rat (predicted: Pig, Sheep, Cow, Chicken, Dog)

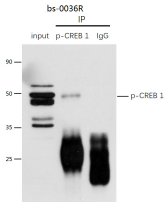
**Predicted MW.:** 37 kDa

**Subcellular Location:** Nucleus

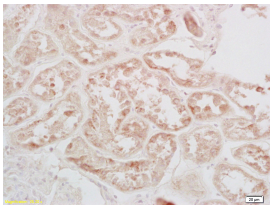
## VALIDATION IMAGES



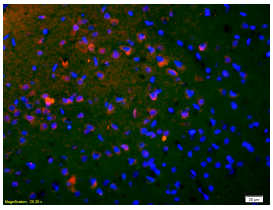

Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Cerebellum (Mouse) Lysate at 40 ug Lane 3: Kidney (Mouse) Lysate at 40 ug Lane 4: Huvec (Human) Cell Lysate at 30 ug Primary: Anti-phospho-CREB-1 (Ser133) (bs-0036R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 43 kD Observed band size: 45 kD



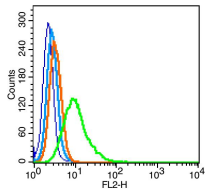

P-CREB1 was immunoprecipitated from mouse kidney tissue with bs-0036R at 1/150 dilution. Western blot was performed from the immunoprecipitate using protein A/G beads. HRP Conjugated Mouse anti-Rabbit IgG (Light Chain specific) was used as secondary antibody at 1:5000 dilution. Lane 1: mouse kidney tissue lysate 10 μg (Input). Lane 2: bs-0036R IP in mouse kidney tissue lysate. Lane 3: native rabbit IgG IP in mouse kidney tissue lysate (negative control). Secondary All lanes : Mouse anti-Rabbit IgG (Light Chain specific), HRP Conjugated, 1:5000



Tissue/cell:bs-0036R human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-phospho-CREB-1(Ser133) Polyclonal Antibody, Unconjugated(bs-0036R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-phospho-CREB-1(Ser133) Polyclonal Antibody, Unconjugated(bs-0036R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated (bs-0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei




Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1µg in 100 µL1X PBS containing 0.5% BSA(green).

## SELECTED CITATIONS


- **[IF=8.4]** Hu Bowen. et al. Local GHR roles in regulation of mitochondrial function through mitochondrial biogenesis during myoblast differentiation. CELL COMMUN SIGNAL. 2023 Dec;21(1):1-18 WB ;Chicken. 37337300
- **[IF=8.2]** Liang Shi-peng. et al. Activated SIRT1 contributes to DPT-induced glioma cell parthanatos by upregulation of NOX2 and NAT10. ACTA PHARMACOL SIN. 2023 Jun;:1-14 WB ;Mouse,Human. 37277492
- **[IF=5.7]** Huifang Niu. et al. Molecular Mechanism of Pasteurized Akkermansia muciniphila in Alleviating Type 2 Diabetes Symptoms. J AGR FOOD CHEM. 2024;72(23):13083–13098 WB ;Mouse. 38829529
- **[IF=6.317]** Lina Zhao. et al. Study on Lactiplantibacillus plantarum R6-3 from Sayram Ketteki to prevent chronic unpredictable mild stress-induced depression in mice through the microbiota–gut–brain axis. FOOD FUNCT. 2023 Mar;: WB ;Mouse. 36938927
- **[IF=6.1]** Yijin Wang. et al. Peanut oil odor enhances the immunomodulatory effect on immunosuppressed mice by regulating cAMP signaling pathway via brain-spleen axis. FOOD FUNCT. 2024 Jan;: WB ;Mouse. 10.1039/D3FO03629D