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## ATF4 Rabbit pAb

Catalog Number: bs-1531R

Target Protein: ATF4

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (0.2µg /test), ICC/IF (1:100)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Pig, Sheep, Cow, Dog, Horse)

Predicted MW: 38 kDa

Entrez Gene: 468

Swiss Prot: P18848

Source: KLH conjugated synthetic peptide derived from human ATF4: 251-351/351.

Purification: affinity purified by Protein A

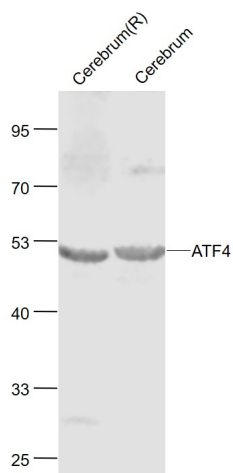
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

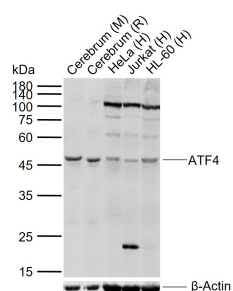
**Background:** ATF4 is a transcription factor that was originally identified as a widely expressed mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP1 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 (referenced from Entrez gene).

### VALIDATION IMAGES

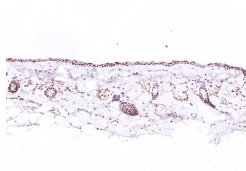
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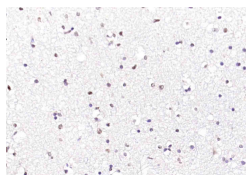
Sample: Cerebrum (Rat) Lysate at 40 ug Cerebrum (Mouse) Lysate at 40 ug Primary: Anti-ATF4 (bs-1531R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 37' 50 kD Observed band size: 50 kD



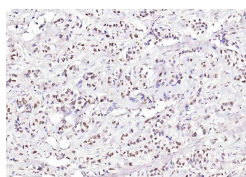
Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Rat Cerebrum tissue lysates Lane 3: Human HeLa cell lysates Lane 4: Human Jurkat cell lysates Lane 5: Human HL-60 cell lysates Primary: Anti-ATF4 (bs-1531R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 38 kDa Observed band size: 47 kDa



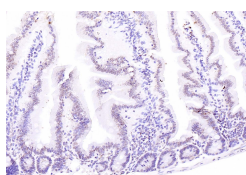
Paraformaldehyde-fixed, paraffin embedded (rat skin); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATF4) Polyclonal Antibody, Unconjugated (bs-1531R) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human brain); 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 (ATF4) Polyclonal Antibody, Unconjugated (bs-1531R) 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 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 (ATF4) Polyclonal Antibody, Unconjugated (bs-1531R) 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 (mouse intestine); 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 (ATF4) Polyclonal Antibody, Unconjugated (bs-1531R) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=12.8] Xinli Wang, et al. Sustained therapeutic effects of self-assembled hyaluronic acid nanoparticles loaded with  $\alpha$ -Ketoglutarate in

various osteoarthritis stages. BIOMATERIALS. 2024 Sep;:122845 WB ; Mouse . 39326362

[IF=9.274] Wiebke Sachs. et al. Distinct Modes of Balancing Glomerular Cell Proteostasis in Mucopolidosis Type II and III Prevent Proteinuria. J Am Soc Nephrol. 2020 Aug;31(8):1796-1814 WB,IF ; Mouse . 32641396

[IF=5.9] Shiokawa Daisuke. et al. Elevated stress response marks deeply quiescent reserve cells of gastric chief cells. COMMUN BIOL. 2023 Nov;6(1):1-10 IF ; Mouse . 37985874

[IF=5.778] Yuting Wang. et al. Polybrominated diphenyl ethers quinone-induced intracellular protein oxidative damage triggers ubiquitin-proteasome and autophagy-lysosomal system activation in LO2 cells. Chemosphere. 2021 Jul;275:130034 WB ; Human . 33652285

[IF=5.793] Chunyue Wang. et al. Neuroprotective effects of verbascoside against Alzheimer' s disease via the relief of endoplasmic reticulum stress in A $\beta$ -exposed U251 cells and APP/PS1 mice. J Neuroinflamm. 2020 Dec;17(1):1-16 WB ; Human . 33070776