bs-0022R **[Primary Antibody]**

ERK1 + ERK2 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5594 **SWISS:** P27361

Target: ERK1 + ERK2

Immunogen: KLH conjugated synthetic peptide derived from human ERK2: 301-358/358.

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 protein encoded by this gene is a member of the MAPkinase family. MAP kinases, also known as extracellularsignal-regulated kinases (ERKs), act in a signaling cascade thatregulates various cellular processes such as proliferation,differentiation, and cell cycle progression in response to avariety of extracellular signals. This kinase is activated byupstream kinases, resulting in its translocation to the nucleuswhere it phosphorylates nuclear targets. Alternatively splicedtranscript variants encoding different protein isoforms have beendescribed. [provided by RefSeq, Jul 2008].

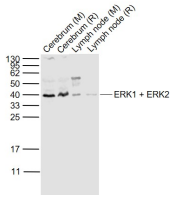
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg/Test)

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

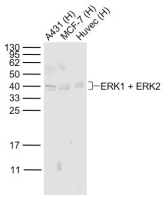
Predicted MW.: 42 kDa

Subcellular Location: Nucleus

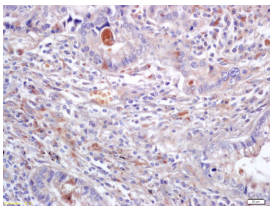
VALIDATION IMAGES



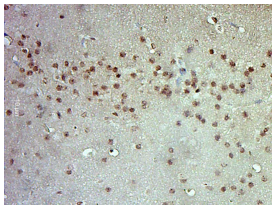
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Cerebrum (Rat) Lysate at 40 ug Lane 3: Lymph node (Mouse) Lysate at 40 ug Lane 4: Lymph node (Rat) Lysate at 40 ug Primary: Anti-ERK1 + ERK2 (bs-0022R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 44/42 kD Observed band size: 40 kD



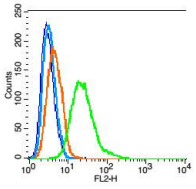
Sample: Lane 1: A431 (Human) Cell Lysate at 30 ug Lane 2: MCF-7 (Human) Cell Lysate at 30 ug Lane 3: Huvec (Human) Cell Lysate at 30 ug Primary: Anti-ERK1 + ERK2 (bs-0022R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 44/42 kD Observed band size: 42/40 kD



Tissue/cell: human lung carcinoma; 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-ERK2/MAPK1 Polyclonal Antibody, Unconjugated(bs-0022R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen



Blank control: Hep G2 cells (blue). Primary Antibody:Rabbit Anti-ERK1 + ERK2 antibody(bs-0022R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control

peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ERK1 + ERK2) Polyclonal Antibody, Unconjugated (bs-0022R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (bs-0022R, 1µg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=14.7]** Li Yin. et al. Macrophage P2Y6R activation aggravates psoriatic inflammation through IL-27-mediated Th1 responses. ACTA PHARM SIN B. 2024 Jun;: WB ;Mouse. 10.1016/j.apsb.2024.06.008
- **[IF=14.528]** Dejun Xu. et al. Melatonin protects mouse testes from palmitic acid‐induced lipotoxicity by attenuating oxidative stress and DNA damage in a SIRT1‐dependent manner. J Pineal Res. 2020 Nov;69(4):e12690 WB ;Mouse. 32761924
- **[IF=10.633]** Fanglin Wang. et al. Adipose-derived stem cells with miR-150-5p inhibition laden in hydroxyapatite/tricalcium phosphate ceramic powders promote osteogenesis via regulating Notch3 and activating FAK/ERK and RhoA. ACTA BIOMATER. 2022 Oct;: WB ;Human. 36206975
- **[IF=8.5]** Liu-Lu Gao. et al. Acteoside suppresses hepatocellular carcinoma progression via modulation of macrophage migration inhibitory factor and mitogen-activated protein kinase proteins. INT J BIOL MACROMOL. 2025 Jun;:145579 IHC,WB ;Human,Mouse. 40582652
- **[IF=7.963]** Meiqiong Wu. et al. Suppression of NADPH oxidase 4 inhibits PM2.5-induced cardiac fibrosis through ROS-P38 MAPK pathway. SCI TOTAL ENVIRON. 2022 Apr;:155558 WB ;Mouse,Rat. 35504386