

ERK1 + ERK2 Rabbit pAb

Catalog Number: bs-0022R

Target Protein: ERK1 + ERK2

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 (1µg/Test)

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

Predicted MW: 42 kDa

Entrez Gene: 5594

Swiss Prot: P27361

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

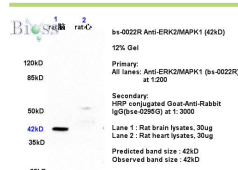
Purification: affinity purified by Protein A

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

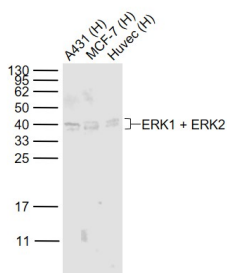
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The protein encoded by this gene is a member of the MAPkinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq, Jul 2008].

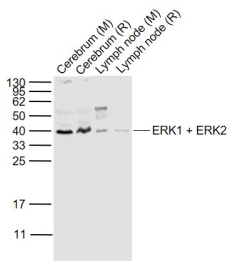
VALIDATION IMAGES



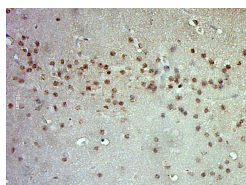
Sample: Brain (Rat) Lysate at 30 ug Heart (Rat) lysate at 30 ug Primary: Anti- ERK2/MAPK1 (bs-0022R) at 1/200 dilution Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/3000 dilution Predicted band size: 42 kD Observed band size: 42 kD



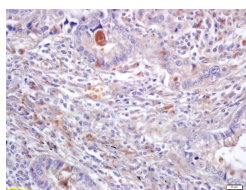
Sample: Lane 1: A431 (Human) Cell Lysate at 30 ug Lane 2: MCF-7 (Human) Cell Lysate at 30 ug Lane 3: Huvec (Human) Cell Lysate at 30 ug Primary: Anti-ERK1 + ERK2 (bs-0022R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 44/42 kD Observed band size: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



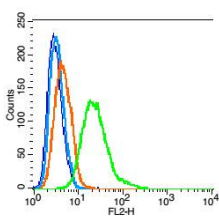
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Cerebrum (Rat) Lysate at 40 ug Lane 3: Lymph node (Mouse) Lysate at 40 ug Lane 4: Lymph node (Rat) Lysate at 40 ug Primary: Anti-ERK1 + ERK2 (bs-0022R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted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



Paraformaldehyde-fixed, paraffin embedded (Mouse 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 (ERK1 + ERK2) Polyclonal Antibody, Unconjugated (bs-0022R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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



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 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 /1x10⁶ 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.

PRODUCT SPECIFIC PUBLICATIONS

[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=7.7] Pilian Niu. et al. A polysaccharide from Glycyrrhiza uralensis attenuates myocardial fibrosis via modulating the MAPK/PI3K/AKT signaling pathway. INT J BIOL MACROMOL. 2024 Nov;;138207 WB ; MOUSE . 39617235

[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