

[Primary Antibody]

ERK1/2 Recombinant Rabbit mAb



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— DATASHEET

Host: Rabbit

Clonality: Recombinant

GeneID: 5594

Target: ERK1/2

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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

Isotype: IgG

CloneNo.: 3A12

SWISS: P27361

Applications: WB (1:1000-2000)

IHC-P (1:100-500)

IHC-F (1:100-500)

IF (1:100-500)

Flow-Cyt (1ug/Test)

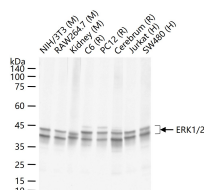
ICC/IF (1:50-200)

Reactivity: Human, Mouse, Rat

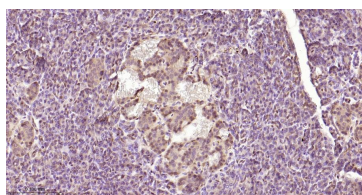
Predicted MW.: 42/44 kDa

Subcellular Location: Nucleus

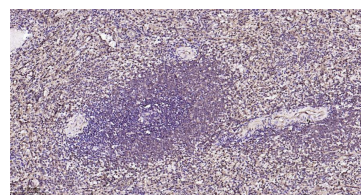
— VALIDATION IMAGES



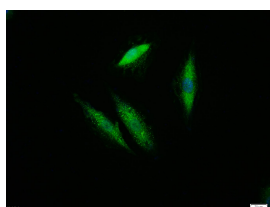
25 ug total protein per lane of various lysates (see on figure) probed with ERK1/2 monoclonal antibody, unconjugated (bsm-52259R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



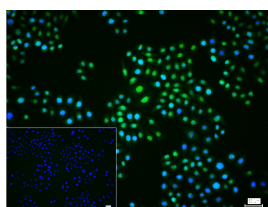
Paraformaldehyde-fixed, paraffin embedded Human Pancreas; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with ERK1/2 Monoclonal Antibody, Unconjugated(bsm-52259R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



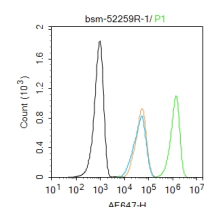
Paraformaldehyde-fixed, paraffin embedded Human Spleen; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with ERK1/2 Monoclonal Antibody, Unconjugated (bsm-52259R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Tissue/cell:A549 cell;4% Paraformaldehyde-fixed;Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Antibody incubation with (ERK1/2) monoclonal Antibody, Unconjugated (bsm-52259R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



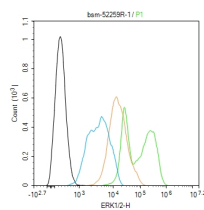
4% Paraformaldehyde-fixed Hela (H) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with (ERK1/2) monoclonal Antibody, unconjugated (bsm-52259R) 1:100, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-60295G-BF488) at 37°C for 90 min, DAPI (blue, C02-04002) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.



Blank control: Hela. Primary Antibody (green line): Rabbit Anti-ERK1/2 antibody (bsm-52259R) Dilution: $1\mu\text{g}/10^6$ cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: $1\mu\text{g}/\text{test}$. Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C . The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min

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at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



The HeLa (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, the cells then were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.). Primary Antibody (green): Rabbit Anti-ERK1/2 antibody (bsm-52259R): 1 µg/10⁶ cells; Secondary Antibody (white blue): Goat anti-Rabbit IgG-BF488 (bs-60295G-BF488): 1 µg/test. Isotype Control (orange): Rabbit IgG (bs-0295P). Blank control (black): PBS. Acquisition of 20,000 events was performed.

— SELECTED CITATIONS —

- **[IF=7.675]** Honghong Zhan. et al. Oxybaphus himalaicus Mitigates Lipopolysaccharide-Induced Acute Kidney Injury by Inhibiting TLR4/MD2 Complex Formation. ANTIOXIDANTS-BASEL. 2022 Dec;11(12):2307 WB ;Mouse. 10.3390/antiox11122307
- **[IF=8.2]** Minghao Yan. et al. Screening, identification and functional validation of Microcystin-LR direct binding target proteins based on thermal proteomics profiling. SCI TOTAL ENVIRON. 2025 Jan;958:178047 WB ;Human. 39675292
- **[IF=5.6]** Myeongjoo Son. et al. Olive Flounder By-Product Prozyme2000P Hydrolysate Ameliorates Age-Related Kidney Decline by Inhibiting Ferroptosis. INT J MOL SCI. 2024 Jan;25(9):4668 WB ;Mouse. 38731887
- **[IF=4.6]** Shorook Ghanem. et al. Tissue factor-heparanase complex: Intracellular non-hemostatic effects. Research and Practice in Thrombosis and Haemostasis. 2023 Aug;:102179 IF ;Human. 10.1016/j.rpth.2023.102179
- **[IF=4.411]** Yudan Zhao. et al. COX-2 is required to mediate crosstalk of ROS-dependent activation of MAPK/NF-κB signaling with pro-inflammatory response and defense-related NO enhancement during challenge of macrophage-like cell line with Giardia duodenalis. PLOS NEGLECT TROP D. 2022 Apr;16(4):e0010402 WB ;Mouse. 35482821