

**bsm-52068R****[ Primary Antibody ]**

**Bioss**  
ANTIBODIES

www.bioss.com.cn

sales@bioss.com.cn

techsupport@bioss.com.cn

400-901-9800

**ERK2 Recombinant Rabbit mAb****DATASHEET****Host:** Rabbit**Isotype:** IgG**Clonality:** Recombinant**CloneNo.:** 3G1**GeneID:** 5594**SWISS:** P28482**Target:** ERK2**Immunogen:** A synthesized peptide derived from human ERK2: 311-360.**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml

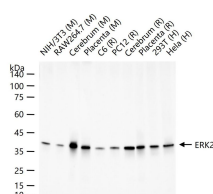
**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.  
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** The protein encoded by this gene is a member of the MAPkinase family. MAP kinases, also known as 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].

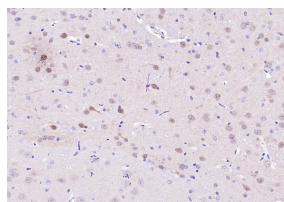
**Applications:** WB (1:500-2000)**IHC-P** (1:50-200)**IHC-F** (1:50-200)**IF** (1:50-200)**Flow-Cyt** (1ug/Test)**ICC/IF** (1:50-200)**IP** (1:20-50)**Reactivity:** Human, Mouse, Rat

**Predicted**  
**MW.:** 42 kDa

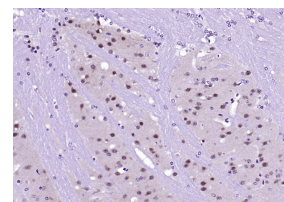
**Subcellular**  
**Location:** Cytoplasm , Nucleus

**VALIDATION IMAGES**

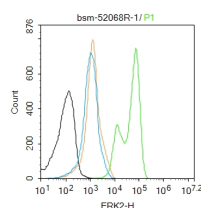
25 ug total protein per lane of various lysates (see on figure) probed with ERK2 monoclonal antibody, unconjugated (bsm-52068R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded (rat 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 (ERK2) Monoclonal Antibody, Unconjugated (bsm-52068R) 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 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 (ERK2) Monoclonal Antibody, Unconjugated (bsm-52068R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: K562. Primary Antibody (green line): Rabbit Anti-ERK2 antibody (bs-52068R)  
Dilution: 1μg/10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-FITC Dilution:

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

0.5µg /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 at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

---

## — SELECTED CITATIONS —

- **[IF=5.923]** Won-Sik Shin. et al. PTK7, a Catalytically Inactive Receptor Tyrosine Kinase, Increases Oncogenic Phenotypes in Xenograft Tumors of Esophageal Squamous Cell Carcinoma KYSE-30 Cells. Int J Mol Sci. 2022 Jan;23(4):2391 WB ;Human. 10.3390/ijms23042391
- **[IF=6.208]** Jae Hoon Kim. et al. Anti-PTK7 Monoclonal Antibodies Exhibit Anti-Tumor Activity at the Cellular Level and in Mouse Xenograft Models of Esophageal Squamous Cell Carcinoma. INT J MOL SCI. 2022 Jan;23(20):12195 WB ;Human. 36293051
- **[IF=5.6]** Won-Sik Shin. et al. Knockdown of PTK7 Reduces the Oncogenic Potential of Breast Cancer Cells by Impeding Receptor Tyrosine Kinase Signaling. INT J MOL SCI. 2023 Jan;24(15):12173 WB ;Human. 37569547