



# ERK 1/2(Phospho Thr202/Tyr204) Rabbit mAb

<b>Catalog No</b>	YP-rAb-17628
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IF,ELISA
<b>Gene Name</b>	MAPK1/MAPK3
<b>Protein Name</b>	Mitogen-activated protein kinase 3
<b>Purification Process</b>	Protein A
<b>Specificity</b>	This antibody detects endogenous levels of p44 and p42 MAP Kinase (Erk1 and Erk2) when dually phosphorylated at Thr202 and Tyr204 of Erk1 (Thr185 and Tyr187 of Erk2), and Erk2 singly phosphorylated at Thr185, and Erk1 singly phosphorylated at Thr202
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	MAPK3 ; ERK1 ; PRKM3 ; Mitogen-activated protein kinase 3 ; MAP kinase 3 ; MAPK 3 ; ERT2 ; Extracellular signal-regulated kinase 1 ; ERK-1 ; Insulin-stimulated MAP2 kinase ; MAP kinase isoform p44 ; p44-MAPK ; Microtubule-associated protein 2 kinase ; p
<b>Observed Band</b>	44kD,42kD
<b>Calculated Molecular Weight</b>	44kD,42kD
<b>Cell Pathway</b>	Cytoplasm, Nucleus
<b>Tissue Specificity</b>	Epithelium, Eye, Hepatoma, Human cervix, Lymph,
<b>Function</b>	Catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium., Domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases., enzyme regulation:Activated by tyrosine phosphorylation in response to insulin and NGF., Function:Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK-1. Phosphorylates EIF4EBP1;





required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).,PTM:Dually phosphorylated on Thr-202 and Tyr-204, which activates the enzyme.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with MORG1 (By similarity). Binds to HIV-1 Nef. This interaction inhibits its kinase activity. Interacts with HSF4 and NISCH.,

### Background

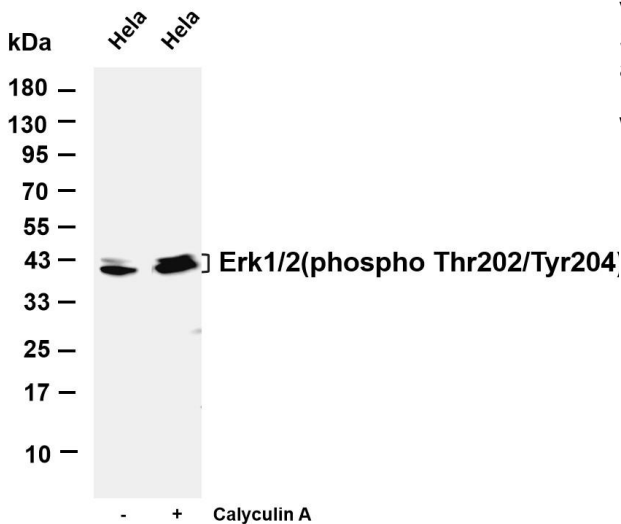
The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety 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],

### matters needing attention

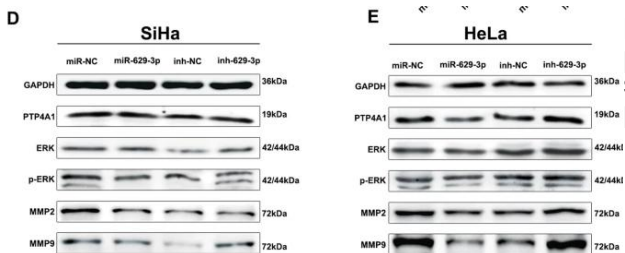
Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

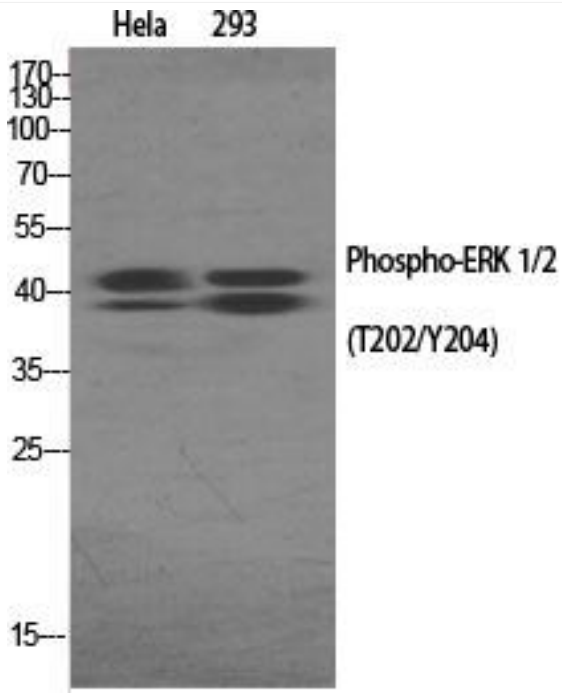


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Erk1/2(phospho Thr202/Tyr204) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: HeLa was starved of serum for 24 hou

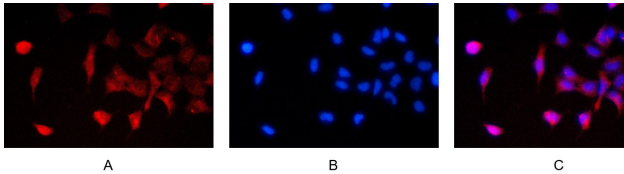


Li, X., Ma, N., Zhang, Y. et al. Circular RNA circNRIP1 promotes migration and invasion in cervical cancer by sponging miR-629-3p and regulating the PTP4A1/ERK1/2 pathway. Cell Death Dis 11, 399 (2020).





Western Blot analysis of various cells using Phospho-ERK 1/2 (T202/Y204) Antibody



Immunofluorescence analysis of HEK293. Picture A: ERK1 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

