



# ERK 8 (phospho Thr175/Y177) Polyclonal Antibody

<b>Catalog No</b>	BYab-14378
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	MAPK15
<b>Protein Name</b>	Mitogen-activated protein kinase 15
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ERK8 around the phosphorylation site of Thr175 and Tyr177. AA range:141-190
<b>Specificity</b>	Phospho-ERK 8 (T175/Y177) Polyclonal Antibody detects endogenous levels of ERK 8 protein only when phosphorylated at T175/Y177.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MAPK15; ERK7; ERK8; Mitogen-activated protein kinase 15; MAP kinase 15; MAPK 15; Extracellular signal-regulated kinase 7; ERK-7; Extracellular signal-regulated kinase 8; ERK-8
<b>Observed Band</b>	60kD
<b>Cell Pathway</b>	Cytoplasm, cytoskeleton, cilium basal body . Cell junction, tight junction . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Cytoplasmic vesicle, autophagosome . Golgi apparatus . Nucleus . Cytoplasm . Cytoplasm, cytoskeleton, spindle . Co-localizes to the cytoplasm only in presence of ESRRA (PubMed:21190936). Translocates to the nucleus upon activation (PubMed:20638370). At prometaphase I, metaphase I (MI), anaphase I, telophase I, and metaphase II (MII) stages, is stably detected at the spindle (By similarity) . .
<b>Tissue Specificity</b>	Widely expressed with a maximal expression in lung and kidney.
<b>Function</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The N-terminal region (1-20) is the minimal region necessary for ubiquitination and

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further proteosomal degradation.,domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by threonine and tyrosine phosphorylation. Inhibited by dual specificity phosphatases, such as DUSP1.,function:In vitro, phosphorylates MBP.,PTM:Dually phosphorylated on Thr-175 and Tyr-177, which activates the enzyme. Autophosphorylated on threonine and tyrosine residues in vitro.,PTM:Ubiquitinated. Ubiquitination may allow its tight kinase activity regulation and rapid turnover. May be ubiquitinated by a SCF E3 ligase.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase

#### Background

catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The N-terminal region (1-20) is the minimal region necessary for ubiquitination and further proteosomal degradation.,domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by threonine and tyrosine phosphorylation. Inhibited by dual specificity phosphatases, such as DUSP1.,function:In vitro, phosphorylates MBP.,PTM:Dually phosphorylated on Thr-175 and Tyr-177, which activates the enzyme. Autophosphorylated on threonine and tyrosine residues in vitro.,PTM:Ubiquitinated. Ubiquitination may allow its tight kinase activity regulation and rapid turnover. May be ubiquitinated by a SCF E3 ligase.,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 CSK/c-Src, ABL1, RET and TGFB111.,tissue specificity:Widely expressed with a maximal expression in lung and kidney.,

#### matters needing attention

Avoid repeated freezing and thawing!

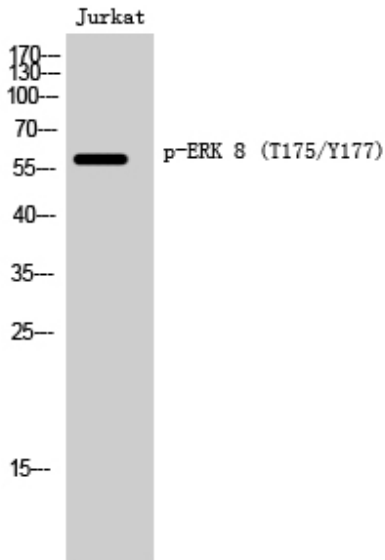
#### Usage suggestions

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

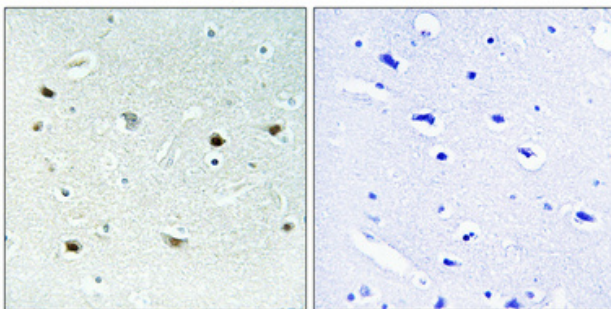
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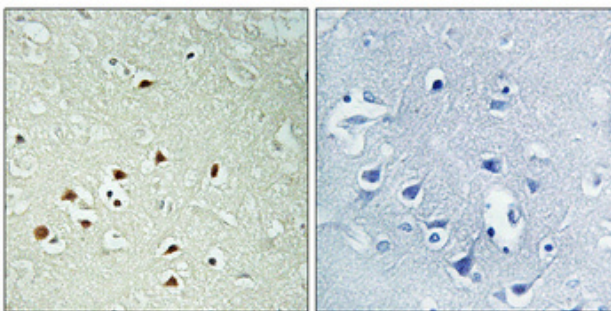
## Products Images



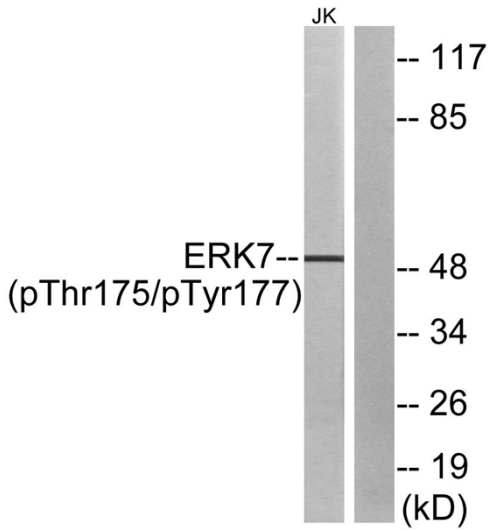
Western Blot analysis of Jurkat cells using Phospho-ERK 8 (T175/Y177) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventibiotec, MN, USA).



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from Jurkat cells, using ERK8 (Phospho-Thr175+Tyr177) Antibody. The lane on the right is blocked with the phospho peptide.