



ERK 8 (phospho Thr175/Y177) Polyclonal Antibody

Catalog No	YP-Ab-14378
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	MAPK15
Protein Name	Mitogen-activated protein kinase 15
Immunogen	The antiserum was produced against synthesized peptide derived from human ERK8 around the phosphorylation site of Thr175 and Tyr177. AA range:141-190
Specificity	Phospho-ERK 8 (T175/Y177) Polyclonal Antibody detects endogenous levels of ERK 8 protein only when phosphorylated at T175/Y177.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	60kD
Cell Pathway	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). .
Tissue Specificity	Widely expressed with a maximal expression in lung and kidney.
Function	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 kinas

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

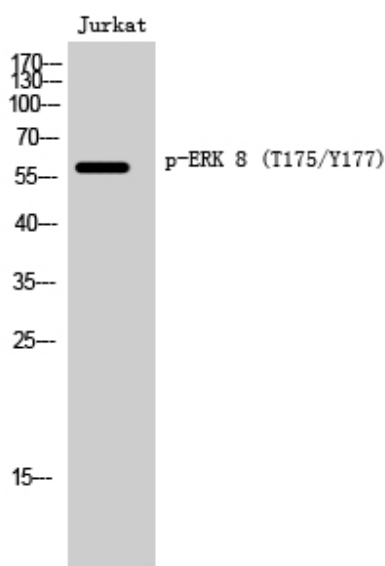
Avoid repeated freezing and thawing!

Usage suggestions

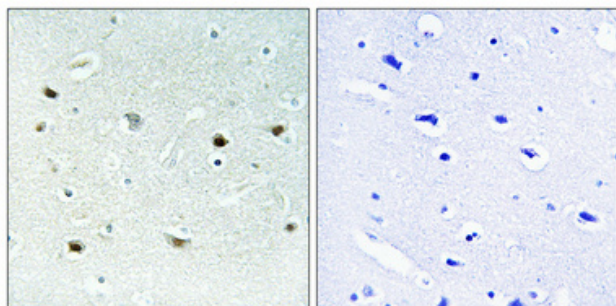
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



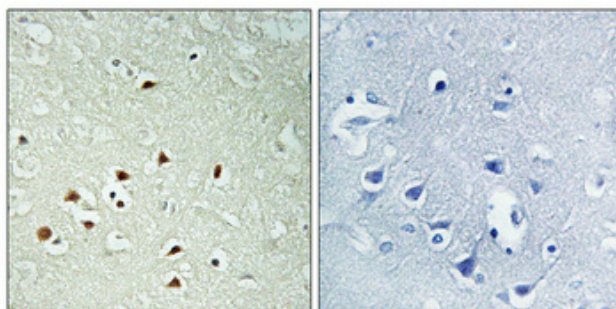
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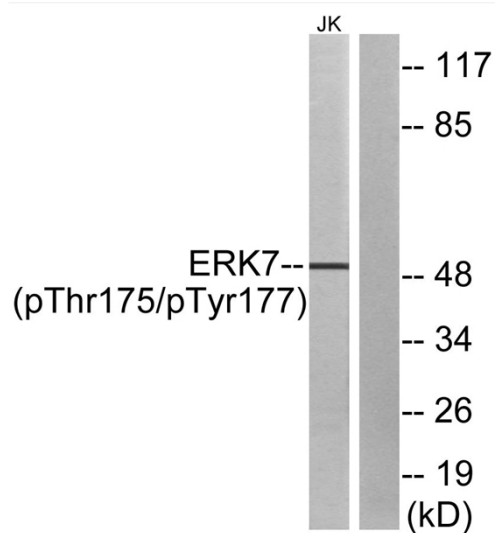
Western Blot analysis of Jurkat cells using Phospho-ERK 8 (T175/Y177) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (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, pH 8.0 was used for antigen retrieval. Negative control (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.