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Rabbit Anti-phospho-MEK1 (Thr386) antibody

SL5413R

Product Name:	phospho-MEK1 (Thr386)
Chinese Name:	磷酸化丝裂原活化蛋白激酶1抗体
Alias:	MEK1 (phospho Thr386); MEK1 (phospho T386); p-MEK1 (Thr386); p-MEK1 (T386); Dual specificity mitogen activated protein kinase kinase 1; ERK activator kinase 1; MAP kinase kinase 1; MAP kinase/Erk kinase 1; MAP/Erk kinase 1; Map2K1; MAPK/ERK kinase 1; MAPKK 1; MAPKK1; MEK 1; MEKK1; Mitogen activated protein kinase kinase 1; MKK 1; MKK1; PRKMK 1; PRKMK1;Protein kinase mitogen activated kinase 1 (MAP kinase kinase 1); Protein kinase mitogen activated kinase 1; Protein kinase mitogen activated, kinase 1; MP2K1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	43kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human MEK1 around the phosphorylation site of Thr386:SP(p-T)PT
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:	PubMed
Product Detail:	The protein encoded by this gene is a member of the dual specificity protein kinase family, which acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein kinase lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon wide variety of extra- and intracellular signals. As an essential component of MAP kinase signal transduction pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development. **Function:** Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Binding of extracellular ligands such as growth factors, cytokines and hormones to their cell-surface receptors activates RAS and this initiates RAF1 activation. RAF1 then further activates the dual-specificity protein kinases MAP2K1/MEK1 and MAP2K2/MEK2. Both MAP2K1/MEK1 and MAP2K2/MEK2 function specifically in the MAPK/ERK cascade, and catalyze the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in the extracellular signal-regulated kinases MAPK3/ERK1 and MAPK1/ERK2, leading to their activation and further transduction of the signal within the MAPK/ERK cascade. Depending on the cellular context, this pathway mediates diverse biological functions such as cell growth, adhesion, survival and differentiation, predominantly through the regulation of transcription, metabolism and cytoskeletal rearrangements. One target of the MAPK/ERK cascade is peroxisome proliferator-activated receptor gamma (PPARG), a nuclear receptor that promotes differentiation and apoptosis. MAP2K1/MEK1 has been shown to export PPARG from the nucleus. The MAPK/ERK cascade is also involved in the regulation of endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC), as well as in the fragmentation of the Golgi apparatus during mitosis. **Subunit:** Found in a complex with at least BRAF, HRAS1, MAP2K1, MAPK3/ERK1 and RGS14 (By similarity). Forms an heterodimer with MAP2K2/MEK2 (By similarity). Forms heterodimers with KSR2 which further dimerize to form tetramers (By similarity). Interacts with ARBB2, LAMTOR3, MAPK1/ERK2, MORG1 and RAF1 (By similarity). Interacts with PPARG and with isoform 1 of VRK2. Interacts with Yersinia yopJ. Interacts with SGK1. Interacts with BIRC6/bruce. **Subcellular Location:** Cytoplasm, cytoskeleton, centrosome. Cytoplasm, cytoskeleton, spindle pole body. Cytoplasm. Nucleus. Note=Localizes at centrosomes during prometaphase, midzone during anaphase and midbody during telophase/cytokinesis. **Tissue Specificity:** Widely expressed, with extremely low levels in brain.

Post-translational modifications:
Phosphorylation at Ser-218 and Ser-222 by MAP kinase kinase kinases (RAF or MEKK1) positively regulates kinase activity. Also phosphorylated at Thr-292 by MAPK1/ERK2 and at Ser-298 by PAK. MAPK1/ERK2 phosphorylation of Thr-292 occurs in response to cellular adhesion and leads to inhibition of Ser-298 phosphorylation by PAK.

Similarity:
Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.
Contains 1 protein kinase domain.

SWISS:
Q02750

Gene ID:
5604

Database links:

Entrez Gene: 5604Human

Entrez Gene: 26395Mouse

Entrez Gene: 170851Rat

Omim: 176872Human

SwissProt: Q02750Human

SwissProt: P31938Mouse

SwissProt: Q01986Rat

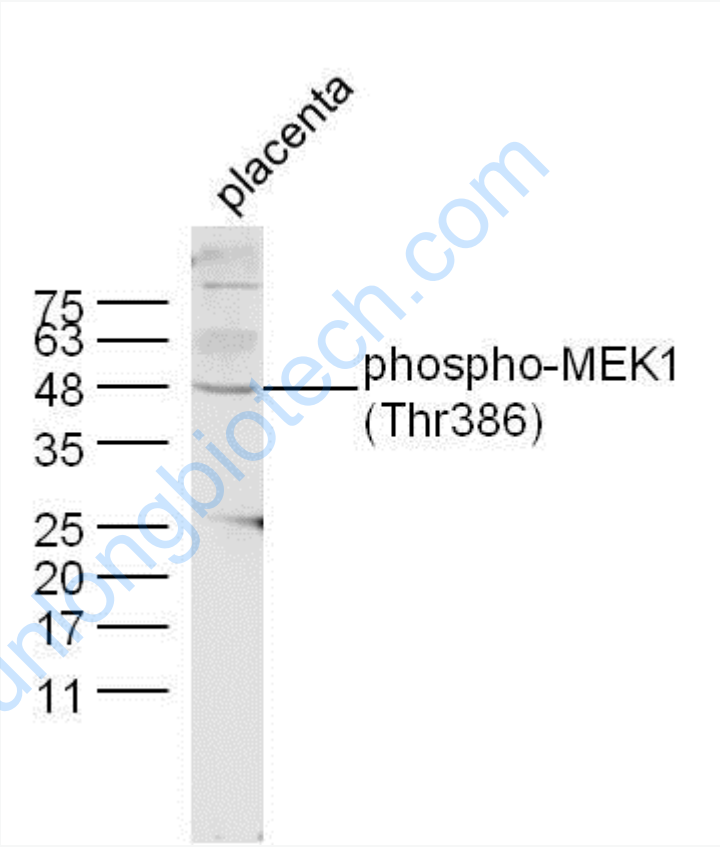
Unigene: 145442Human

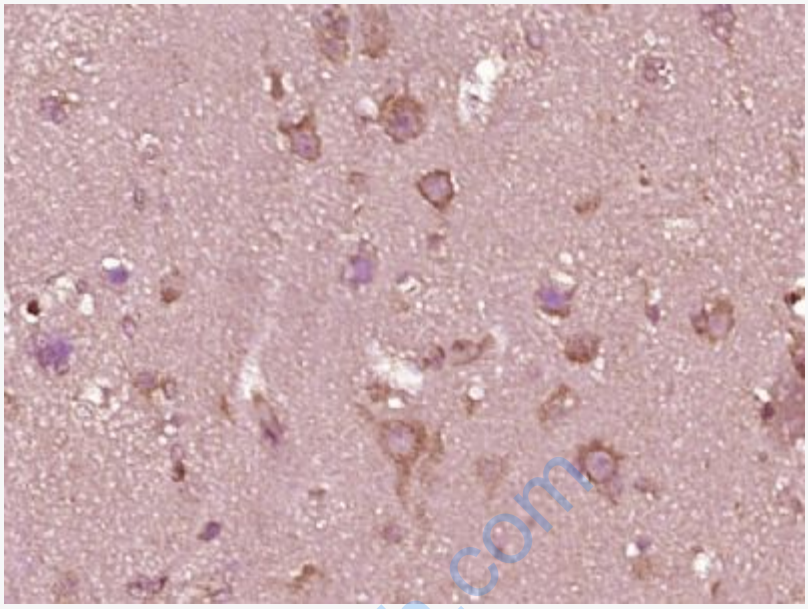
Unigene: 248907Mouse

Unigene: 5850Rat

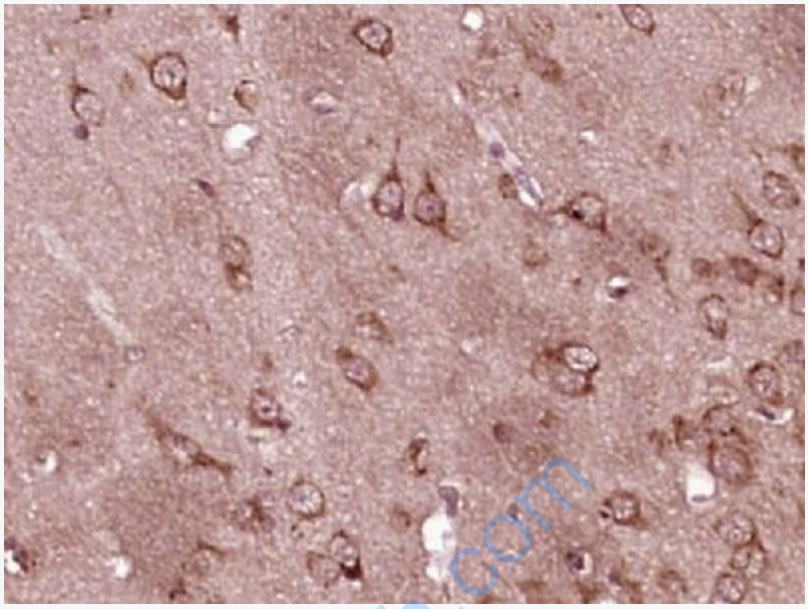
Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

丝裂原活化蛋白激酶是一组可以被多种细胞外信号即获得蛋白丝/苏氨酸激酶，处于胞浆信号传导通路的终末位置，活化后转位到核内，作用于核内转录因子，调节基因表达。它主要参与生长因子、激素、cell factor、应激等各种刺激下细胞的反应、细胞的生长、分化过程。经研究证实，MAPK

	Signal transduction通路存在于大多数细胞内，在将细胞外刺激Signal transduction至细胞及其核内，并引起Cell biology学反应（如细胞增殖、分化、转化及凋亡等）的过程中具有至关重要的作用。研究表明，MAPKSignal transduction通路在细胞内具有生物进化的高度保守性，在低等原核细胞和高等哺乳类细胞内，目前均已发现存在着多条并行的MAPK信号通路，不同的细胞外刺激可使用不同的MAPK信号通路，通过其相互调控而介导不同的Cell biology学反应。
Picture:	 Sample: placenta (Mouse) Lysate at 40 ug Primary: Anti-phospho-MEK1 (Thr386) (Bs- 5413R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 43 kD Observed band size: 48 kD



Paraformaldehyde-fixed, paraffin embedded (human brain glioma); 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 (MEK1 (Thr386)) Polyclonal Antibody, Unconjugated (SL5413R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); 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 (MEK1 (Thr386)) Polyclonal Antibody, Unconjugated (SL5413R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.