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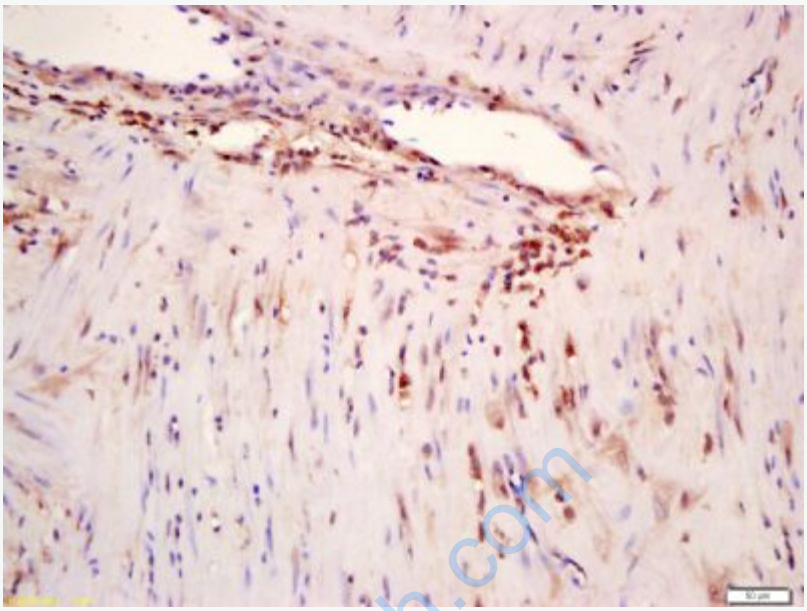
Rabbit Anti-phospho-ERK5 (Ser496) antibody

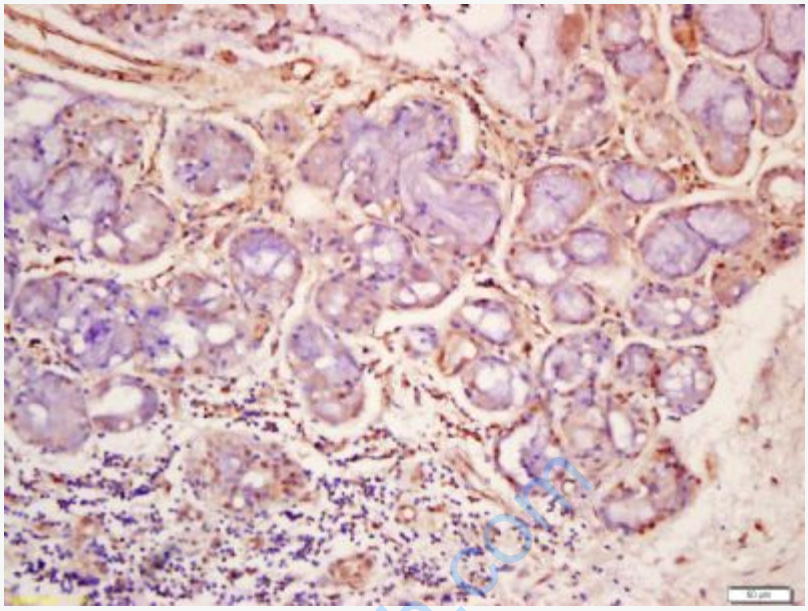
SL5484R

Product Name:	phospho-ERK5 (Ser496)
Chinese Name:	磷酸化细胞外信号调节激酶5抗体
Alias:	ERK5 (phospho S496); Big MAP kinase 1; BMK 1; BMK 1 kinase; BMK-1; BMK1; BMK1 Kinase; EC 2.7.11.24; ERK 4; ERK 5; ERK-5; ERK4; Extracellular Signal Regulated Kinase 5; Extracellular signal-regulated kinase 5; MAP kinase 7; MAPK 7; MAPK7; Mitogen Activated Protein Kinase 7; Mitogen-activated protein kinase 7; MK07_HUMAN; OTTHUMP00000065906; OTTHUMP00000065907; PRKM 7; PRKM7; PROTEIN KINASE, MITOGEN-ACTIVATED, 7.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
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:	90kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ERK5 around the phosphorylation site of Ser496:GP(p-S)AP
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 MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracelluar signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two distinct isoforms have been reported. [provided by RefSeq, Jul 2008] **Function:** Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression. **Subunit:** Interacts with MAP2K5. Forms oligomers (By similarity). Interacts with MEF2A, MEF2C and MEF2D; the interaction phosphorylates the MEF2s and enhances transcriptional activity of MEF2A, MEF2C but not MEF2D (By similarity). Interacts with SGK1. **Subcellular Location:** Cytoplasm. Nucleus. Translocates to the nucleus upon activation. **Tissue Specificity:** Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver. **Post-translational modifications:** Dually phosphorylated on Thr-219 and Tyr-221, which activates the enzyme. Autophosphorylated in vitro on threonine and tyrosine residues when the C-terminal part of the kinase, which could have a regulatory role, is absent. **Similarity:** Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain. **SWISS:**

	Q13164 **Gene ID:** 5598 **Database links:** Entrez Gene: 5598 Human Entrez Gene: 23939 Mouse Entrez Gene: 114509 Rat Omim: 602521 Human SwissProt: Q13164 Human SwissProt: Q9WVS8 Mouse SwissProt: P0C865 Rat Unigene: 150136 Human Unigene: 38172 Mouse Unigene: 144629 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Tissue/cell: human myometrium tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-phospho-ERK5(Ser496) Polyclonal Antibody, Unconjugated(SL5484R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

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