SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-phospho-ERK5 (Thr218 + Tyr220)antibody

Catalog Number: SL11553R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	phospho-ERK5 (Thr218 + Tyr220)
Immunogen:	KLH conjugated synthesised phosphopeptide derived from human ERK5 around the phosphorylation site of Thr218 + Tyr220: FM(p-T)E(p-Y)VA
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Rat(predicted:Mouse,Dog,Pig,Cow,Sheep,GuineaPig)
Predicted MW.:	90kDa
Subcellular Location:	The nucleus cytoplasmic
Background:	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]

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

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	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. **Subunit:** Interacts with MAP2K5. Forms oligomers. Interacts with MEF2A, MEF2C and MEF2D; the interaction phosphorylates the MEF2s and enhances transcriptional activity of MEF2A, MEF2C but not MEF2D. Interacts with SGK1. **Subcellular Location:** Cytoplasm. Nucleus. Note=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. **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.