



Rabbit Anti-MAPK4 antibody

SL1319R

Product Name:	MAPK4
Chinese Name:	丝裂原活化蛋白激酶4抗体
Alias:	Mitogen-activated protein kinase 4; Extracellular signal-regulated kinase 4; ERK-4; MAP kinase isoform p63; p63-MAPK; MNK2; ERK-4; ERK3; Erk3 related; ERK4; Extracellular signal regulated kinase 4; MAP kinase 4; MAPK 4; MAPK4; Mitogen activated protein kinase 4; MK04_HUMAN; p63 MAPK; p63MAPK; PRKM4; A330097D03Rik; Erk3; p63Mapk; Prkm4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=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:	66kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAPK4:21-130/587
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:	Mitogen-activated protein kinase 4 is a member of the mitogen-activated protein kinase family. Tyrosine kinase growth factor receptors activate mitogen-activated protein kinases which then translocate into the nucleus where it phosphorylates nuclear targets.

[provided by RefSeq, Jul 2008]

Function:

Atypical MAPK protein. Phosphorylates microtubule-associated protein 2 (MAP2) and MAPKAPK5. The precise role of the complex formed with MAPKAPK5 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPKAPK5, ERK4/MAPK4 is phosphorylated at Ser-186 and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK4/MAPK4. May promote entry in the cell cycle (By similarity).

Subunit:

Homodimer. Heterodimer with ERK3/MAPK6. Interacts with (via FRIEDE motif) MAPKAPK5.

Subcellular Location:

Cytoplasm. Nucleus. Note=Translocates to the cytoplasm following interaction with MAPKAPK5.

Tissue Specificity:

High expression in heart and brain.

Post-translational modifications:

Phosphorylated at Ser-186 by PAK1, PAK2 and PAK3 resulting in catalytic activation. Phosphorylated by MAPKAPK5 at other sites.

Similarity:

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

Contains 1 protein kinase domain.

SWISS:

P31152

Gene ID:

5596

Database links:

[Entrez Gene: 5596](#) Human

[Entrez Gene: 225724](#) Mouse

[Entrez Gene: 54268](#) Rat

[Omim: 176949](#) Human

[SwissProt: P31152](#) Human

[SwissProt: Q6P5G0](#) Mouse

[SwissProt: Q63454](#) Rat

[Unigene: 433728](#) Human

[Unigene: 254517](#) Mouse

[Unigene: 146899](#) Rat

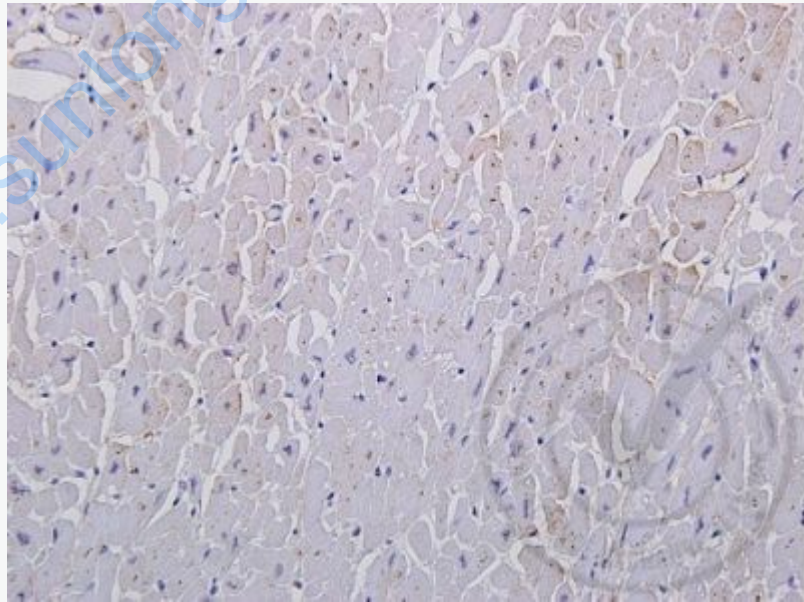
Important Note:

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

MAP kinase

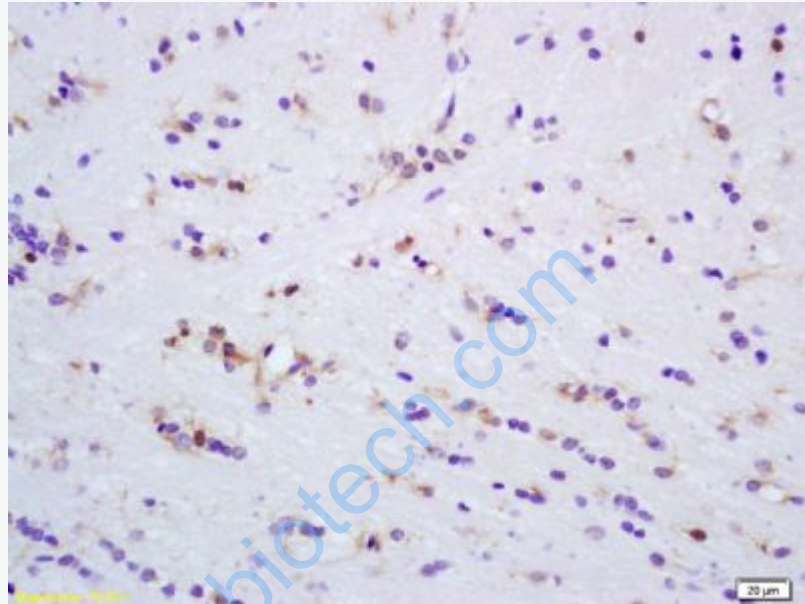
4 (MAPK4) 也是MAPK家族成员, 具有丝/苏氨酸激酶活性。参与细胞生长、增殖、分化、死亡及细胞间的功能同步等多种生理过程, 能够被诸如cell factor、生长因子、神经递质、激素、细胞应急以及细胞粘附等各种刺激因素激活为信号传导途中重要的蛋白激酶, MAPK家族成员之间有很高的同源性。

Picture:



Independently Validated Antibody, image provided by Science Direct, badge number 029727: Formalin-fixed and paraffin embedded human heart labeled with Rabbit Anti-ERK4 Polyclonal Antibody, Unconjugated (SL1319R) at 1:250

overnight at 4°C followed by conjugation to the secondary antibody and DAB staining



Tissue/cell: rat brain 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°C for 20 min;
Incubation: Anti-MAPK4 Polyclonal Antibody, Unconjugated(SL1319R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining