

Rabbit Anti-MAPK4 antibody

SL4131R

Product Name:	MAPK4
Chinese Name:	细胞外信号调节激酶4抗体
Alias:	ERK-4; ERK3; Erk3 related; ERK4; Extracellular signal regulated kinase 4; Extracellular signal-regulated kinase 4; MAP kinase 4; MAP kinase isoform p63; MAPK 4; MAPK-4; Mitogen activated protein kinase 4; Mitogen-activated protein kinase 4; MK04 HUMAN; p63 MAPK; p63-MAPK; p63MAPK; PRKM4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
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:	66kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ERK5:401-500/587
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

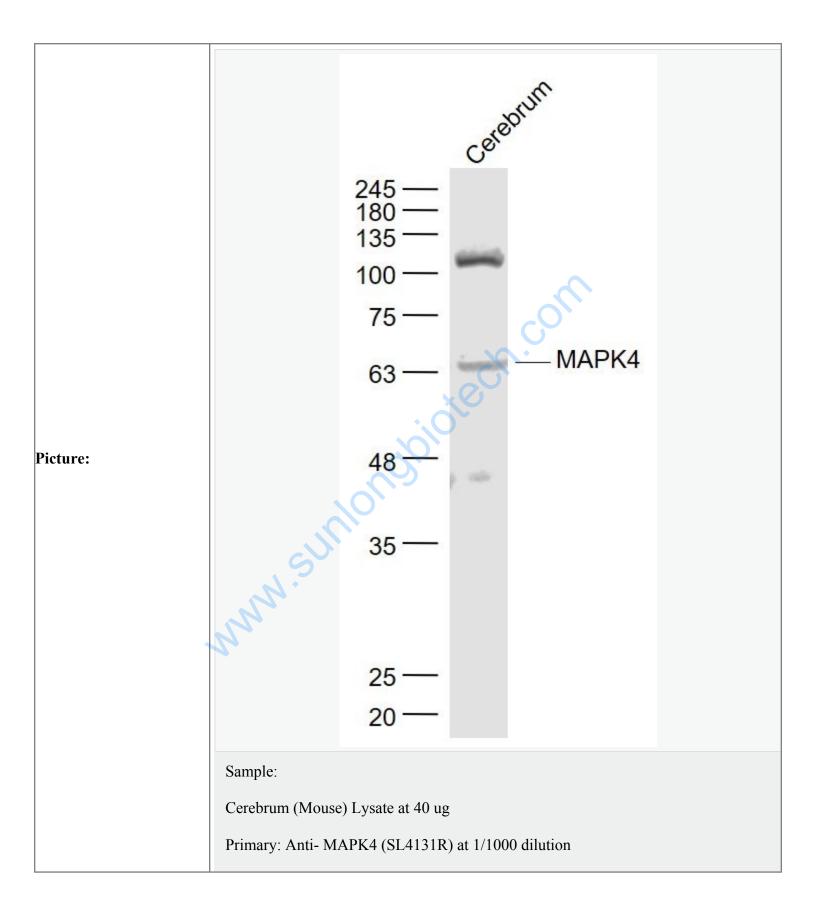
Unigene: 433728 Human

Unigene: 254517 Mouse

Unigene: 146899 Rat

Important Note:

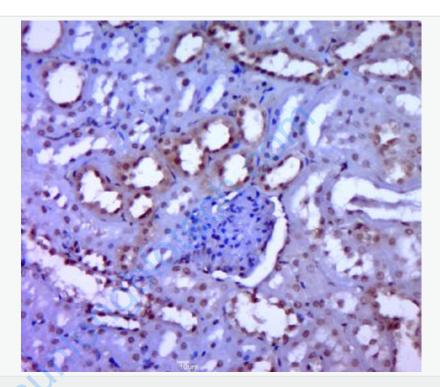
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



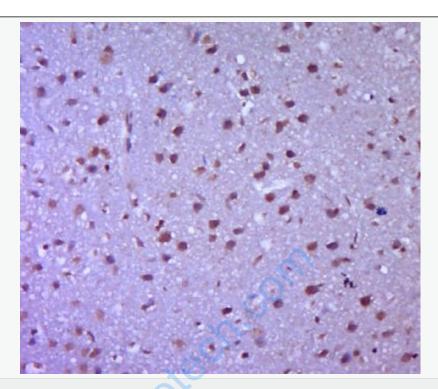
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 66 kD

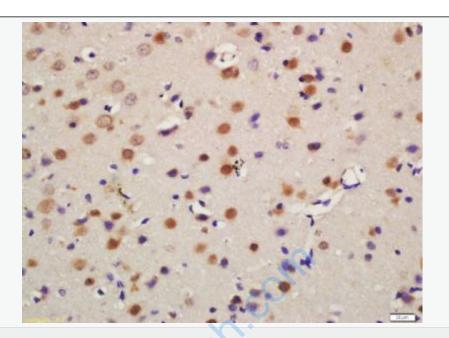
Observed band size: 66 kD



Paraformaldehyde-fixed, paraffin embedded (rat kidney 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 (ERK4) Polyclonal Antibody, Unconjugated (SL4131R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

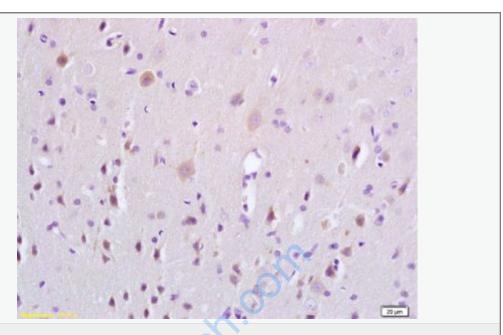


Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ERK4) Polyclonal Antibody, Unconjugated (SL4131R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: mouse 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-ERK4 Polyclonal Antibody, Unconjugated(SL4131R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) 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-ERK4 Polyclonal Antibody, Unconjugated(SL4131R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining