

Rabbit Anti-MAP3K9 antibody

SL21910R

Product Name:	MAP3K9
Chinese Name:	丝裂原活化蛋白激酶3K9抗体
Alias:	MLK1; M3K9_HUMAN; Map3k9; MEKK9; Mitogen activated protein kinase kinase kinase 9; Mitogen-activated protein kinase kinase kinase 9; Mixed lineage kinase 1 (tyr and ser/thr specificity); Mixed lineage kinase 1; PRKE1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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:	122kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAP3K9:231-330/1104
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:	<u>PubMed</u>
Product Detail:	Mixed lineage kinases are a family of protein kinases sharing two leucine zipper-like motifs, which are known to mediate protein dimerization, and a kinase domain whose primary structure is similar to both the tyrosine-specific and the serine/threonine-specific kinase classes. Members of the mixed-lineage kinase (MLK) family include MLK1, MLK2, MLK3 and dual leucine zipper kinase, also designated DLK. MLKs are

expressed in neuronal cells where they are likely to interact between Rac1/Cdc42, MKK4 and MKK7 in death signaling. The human MLK1 gene maps to chromosome 14q24.3-q31 and is expressed in epithelial tumor cell lines of the colon, breast, and esophagus. The human MLK2 gene maps to chromosome 19 q13.2. and encodes a predicted 954 amino acid, src homology 3 (SH3) domain-containing protein. The human MLK3 gene maps to chromosome 11q13.1-13.3 and encodes a 847 amino acid, SH3 domain- and proline rich region-containing protein. Apoptosis mechanisms rely on MLKs as an upstream intermediate of mitochondrial cytochrome c release and caspase activation.

Function:

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade through the phosphorylation of MAP2K4/MKK4 and MAP2K7/MKK7 which in turn activate the JNKs. The MKK/JNK signaling pathway regulates stress response via activator protein-1 (JUN) and GATA4 transcription factors. Plays also a role in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis.

Subunit:

Homodimer.

Tissue Specificity:

Expressed in epithelial tumor cell lines of colonic, breast and esophageal origin.

Post-translational modifications:

Autophosphorylation on serine and threonine residues within the activation loop plays a role in enzyme activation. Thr-312 is likely to be the main autophosphorylation site. Autophosphorylation also occurs on Thr-304 and Ser-308.

DISEASE:

Note=May play a role in esophageal cancer susceptibility and/or development.

Similarity:

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

Contains 1 protein kinase domain.

Contains 1 SH3 domain.

SWISS:

P80192

Gene ID:

4293

Database links:

Entrez Gene: 4293Human

Entrez Gene: 338372 Mouse

Entrez Gene: 500690Rat

Omim: 600136Human

SwissProt: P80192Human

SwissProt: Q3U1V8Mouse

<u>Unigene: 445496</u>Human

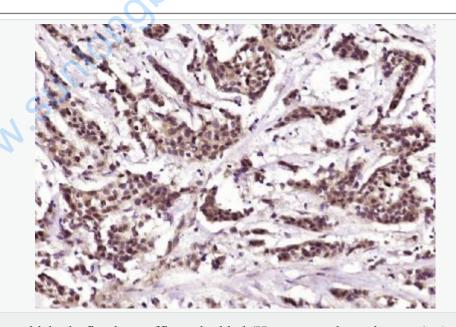
Unigene: 593542Human

Unigene: 35284Mouse

Unigene: 18840Rat

Important Note:

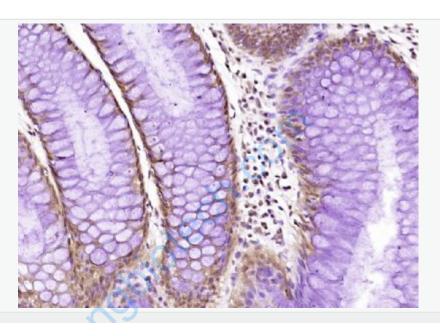
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human esophageal cancer); 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 (MAP3K9) Polyclonal Antibody, Unconjugated (SL21910R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); 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 (MAP3K9) Polyclonal Antibody, Unconjugated (SL21910R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.