

Rabbit Anti-MAP3K9 antibody

SL10424R

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.
Research Area	Cell biology Signal transduction Apoptosis transcriptional regulatory factor Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, (predicted: Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,) WB=1:500-2000 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	122kDa
Cellular localization	cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human MAP3K9: 451-550/1104
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed

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.

Product Detail

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 kinase subfamily.

Contains 1 protein kinase domain.

Contains 1 SH3 domain.

SWISS:

P80192

Gene ID:

4293

Database links:

[Entrez Gene: 4293](#) Human

[Entrez Gene: 338372](#) Mouse

[Entrez Gene: 500690](#) Rat

[Omim: 600136](#) Human

[SwissProt: P80192](#) Human

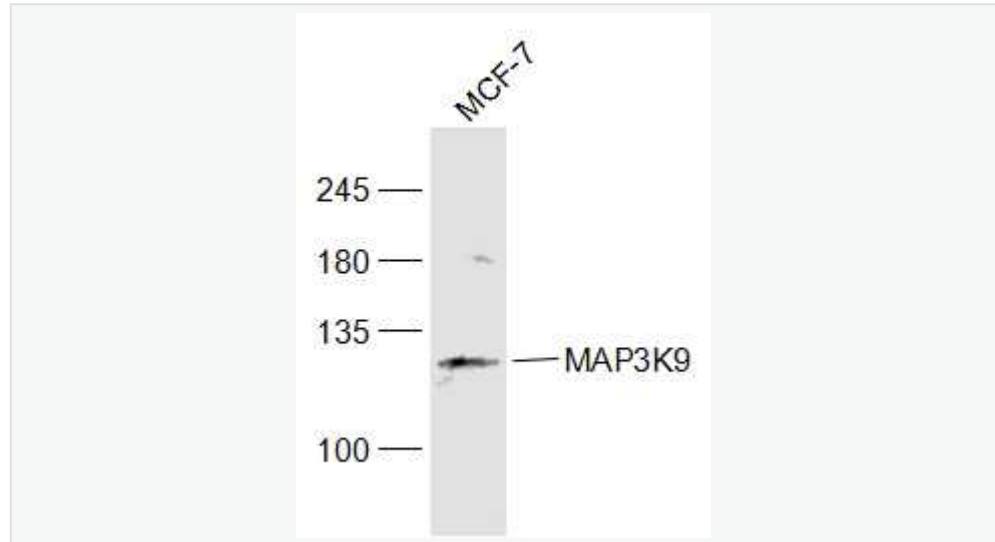
[SwissProt: Q3U1V8](#) Mouse

[Unigene: 445496](#) Human

[Unigene: 593542](#) Human

[Unigene: 35284](#) Mouse

[Unigene: 18840](#) Rat



Product Picture

Sample:

MCF-7(Human) Cell Lysate at 30 ug

Primary: Anti-MAP3K9 (SL10424R) at 1/1000 dilution

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

Predicted band size: 122 kD

Observed band size: 122 kD