



Rabbit Anti-MAPKAP3 antibody

SL18673R

Product Name:	MAPKAP3
Chinese Name:	丝裂原活化蛋白激酶活化的蛋白激酶3抗体
Alias:	3pK; anti MAPKAPK3; Chromosome 3p kinase; EC 2.7.11.1; MAP kinase-activated protein kinase 3; MAPK activated protein kinase 3; MAPK-activated protein kinase 3; MAPK3_HUMAN; MAPKAP; MAPKAP kinase 3; MAPKAP-K3; MAPKAP3; MAPKAPK 3; MAPKAPK-3; Mapkapk3; MAPKAPK3; ; Mitogen activated protein kinase activated protein kinase 3; Mitogen activated protein kinase activated protein kinase; MK-3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=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:	43kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAPKAP3:301-382/382
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:	This gene encodes a member of the Ser/Thr protein kinase family. This kinase functions as a mitogen-activated protein kinase (MAP kinase)- activated protein kinase. MAP

kinases are also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This kinase was shown to be activated by growth inducers and stress stimulation of cells. In vitro studies demonstrated that ERK, p38 MAP kinase and Jun N-terminal kinase were all able to phosphorylate and activate this kinase, which suggested the role of this kinase as an integrative element of signaling in both mitogen and stress responses. This kinase was reported to interact with, phosphorylate and repress the activity of E47, which is a basic helix-loop-helix transcription factor known to be involved in the regulation of tissue-specific gene expression and cell differentiation. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Sep 2011]

Function:

Stress-activated serine/threonine-protein kinase involved in cytokines production, endocytosis, cell migration, chromatin remodeling and transcriptional regulation. Following stress, it is phosphorylated and activated by MAP kinase p38-alpha/MAPK14, leading to phosphorylation of substrates. Phosphorylates serine in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue. MAPKAPK2 and MAPKAPK3, share the same function and substrate specificity, but MAPKAPK3 kinase activity and level in protein expression are lower compared to MAPKAPK2. Phosphorylates HSP27/HSPB1, KRT18, KRT20, RCSD1, RPS6KA3, TAB3 and TTP/ZFP36. Mediates phosphorylation of HSP27/HSPB1 in response to stress, leading to dissociate HSP27/HSPB1 from large small heat-shock protein (sHsps) oligomers and impair their chaperone activities and ability to protect against oxidative stress effectively. Involved in inflammatory response by regulating tumor necrosis factor (TNF) and IL6 production post-transcriptionally: acts by phosphorylating AU-rich elements (AREs)-binding proteins, such as TTP/ZFP36, leading to regulate the stability and translation of TNF and IL6 mRNAs.

Subcellular Location:

Nucleus. Cytoplasm. Predominantly located in the nucleus, when activated it translocates to the cytoplasm.

Tissue Specificity:

Widely expressed, with a higher expression level observed in heart and skeletal muscle. No expression in brain.

Post-translational modifications:

Phosphorylated and activated by MAPK1/ERK2 and MAPK3/ERK1. Phosphorylated and activated by MAP kinase p38-alpha/MAPK14 at Thr-201, Ser-251 and Thr-313.

Similarity:

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. Contains 1 protein kinase domain.

SWISS:

Q16644

Gene ID:
7867

Database links:

[Entrez Gene: 615215](#) Cow

[Entrez Gene: 7867](#) Human

[Entrez Gene: 102626](#) Mouse

[Entrez Gene: 315994](#) Rat

[Omim: 602130](#) Human

[SwissProt: Q3SYZ2](#) Cow

[SwissProt: Q16644](#) Human

[SwissProt: Q3UMW7](#) Mouse

[SwissProt: Q66H84](#) Rat

[Unigene: 234521](#) Human

[Unigene: 735013](#) Human

[Unigene: 222612](#) Mouse

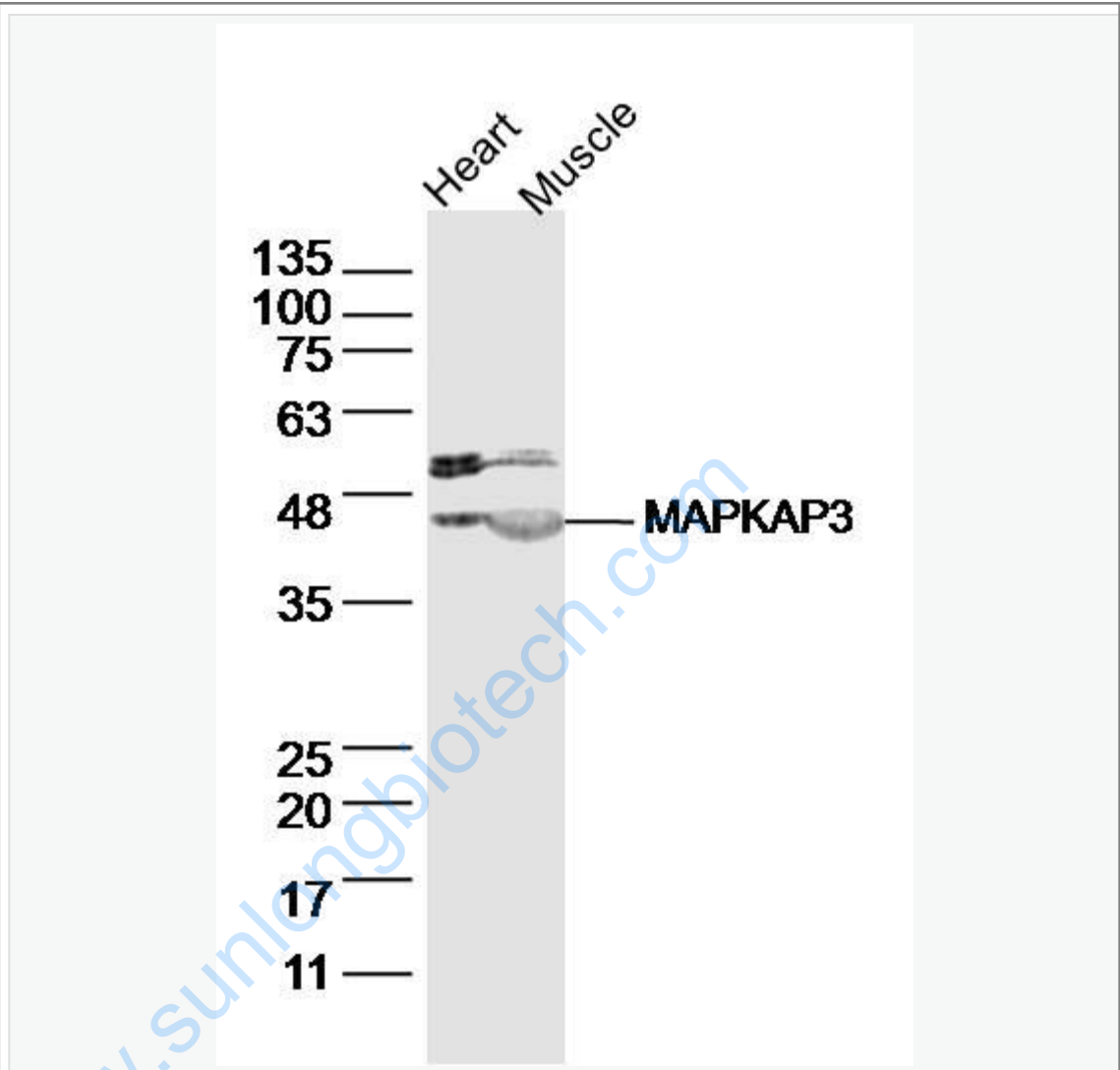
[Unigene: 445242](#) Mouse

[Unigene: 8789](#) Rat

Important Note:

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

Picture:



Sample:

Heart (Mouse) Lysate at 40 ug

Muscle (Mouse) Lysate at 40 ug

Primary: Anti-MAPKAP3 (SL18673R) at 1/300 dilution

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

Predicted band size: 43 kD

Observed band size: 43 kD