



# 3pK Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14639
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	MAPKAPK3
<b>Protein Name</b>	MAP kinase-activated protein kinase 3
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MAPK3. AA range:301-350
<b>Specificity</b>	3pK Polyclonal Antibody detects endogenous levels of 3pK protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MAPKAPK3; MAP kinase-activated protein kinase 3; MAPK-activated protein kinase 3; MAPKAP kinase 3; MAPKAP-K3; MAPKAPK-3; MK-3; Chromosome 3p kinase; 3pK
<b>Observed Band</b>	42kD
<b>Cell Pathway</b>	Nucleus . Cytoplasm . Predominantly located in the nucleus, when activated it translocates to the cytoplasm.
<b>Tissue Specificity</b>	Widely expressed, with a higher expression level observed in heart and skeletal muscle. No expression in brain. Expressed in the retinal pigment epithelium (PubMed:26744326).
<b>Function</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Modulator of polycomb-mediated repression, which can be activated either by ERK, p38 and JNK. Substrate of CSBP. In vitro, phosphorylates HSPB1, BMI1/PCGF4 and TCF3.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subcellular location:Predominantly located in the nucleus, when activated it translocates to the cytoplasm.,subunit:Interacts with TCF3 and with polycomb proteins, such as PCH2 and BMI1/PCGF4.,tissue specificity:Widely expressed, with a higher expression level observed in heart and skeletal muscle. No expression in brain.,



## Background

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

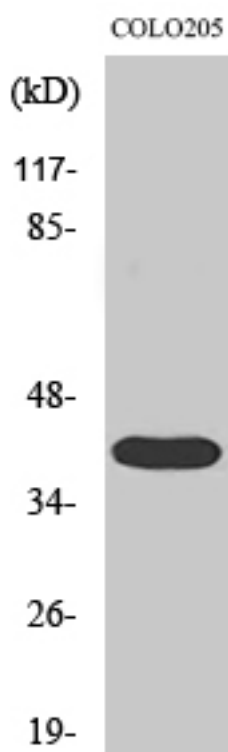
## matters needing attention

Avoid repeated freezing and thawing!

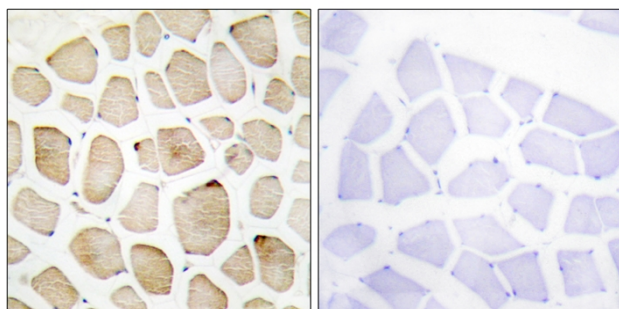
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

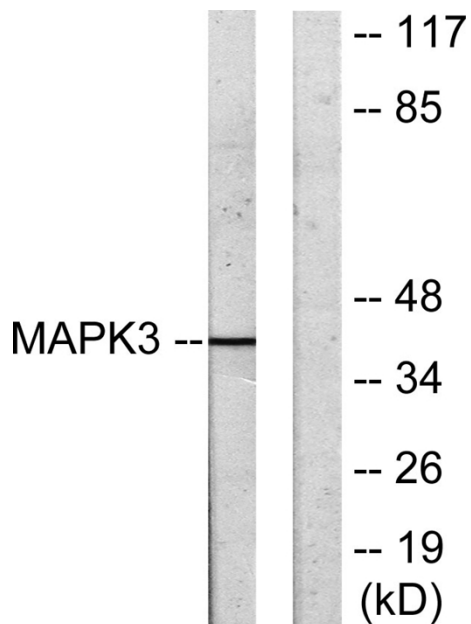
## Products Images



Western Blot analysis of various cells using 3pK Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using MAPK3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO205 cells, using MAPK3 Antibody. The lane on the right is blocked with the synthesized peptide.