

Rabbit Anti-phospho-SAPK3 (Thr183+Tyr185) antibody

SL12001R

Product Name:	phospho-SAPK3 (Thr183+Tyr185)
Chinese Name:	磷酸化丝裂原活化蛋白激酶磷酸酶p38γ抗体
Alias:	p-SAPK3(phospho-Thr183+Tyr185); MAP kinase 12; MAP kinase p38 gamma; MAPK 12; Mapk12; Mitogen Activated Protein Kinase 12; ERK6; ERK 6; ERK-6; Extracellular signal-regulated kinase 6; Mitogen activated protein kinase 3; Mitogen activated protein kinase p38 gamma; Mitogen-activated protein kinase p38 gamma; MK12_HUMAN; P38 GAMMA; P38GAMMA; PRKM12; SAPK 3; SAPK3; Stress Activated Protein Kinase 3; Stress-activated protein kinase 3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit, Guinea Pig,
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:	42kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human SAPK3 around the phosphorylation site of Thr183+Tyr185:EM(p-T)G(p-Y)VV
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

MAP (mitogen-activated protein) kinases play a significant role in many biological processes, including cell adhesion and spreading, cell differentiation and apoptosis. p38 alpha, p38 beta and p38 gamma, also known as MAPK14, MAPK11 and MAPK12, respectively, each contain one protein kinase domain and belong to the MAP kinase family. Expressed in different areas throughout the body with common expression patterns in heart, p38 proteins use magnesium as a cofactor to catalyze the ATP-dependent phosphorylation of target proteins. Via their catalytic activity, p38 alpha, p38 beta and p38 gamma are involved in a variety of events throughout the cell, including signal transduction pathways, cytokine production and cell proliferation and differentiation. The p38 proteins are subject to phosphoryation on Thr and Tyr residues, an event which is thought to activate the phosphorylated protein.

Function:

Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating downstream targets. Plays a role in myoblast differentiation and also in the down-regulation of cyclin D1 in response to hypoxia in adrenal cells suggesting MAPK12 may inhibit cell proliferation while promoting differentiation.

Subcellular Location:

Cytoplasm. Mitochondrion. Mitochondrial when associated with SH3BP5.

Product Detail:

Tissue Specificity:

Highly expressed in skeletal muscle and heart.

Post-translational modifications:

Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme.

Similarity:

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

Contains 1 protein kinase domain.

SWISS:

P53778

Gene ID:

6300

Database links:

Entrez Gene: 6300Human

Entrez Gene: 29857Mouse

Omim: 602399Human

SwissProt: P53778Human

SwissProt: 008911Mouse

Unigene: 432642Human

Unigene: 38343 Mouse

Important Note:

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