



PRAK Monoclonal Antibody

Catalog No	YP-mAb-14959
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	MAPKAPK5
Immunogen	The antiserum was produced against synthesized peptide derived from human MAPKAPK5. AA range:148-197
Specificity	PRAK Monoclonal Antibody detects endogenous levels of PRAK protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MAP kinase-activated protein kinase 5;MAPK-activated protein kinase 5; MAPK5_HUMAN;MAPKAP kinase 5;MAPKAPK-5;MAPKAPK5;Mitogen activated protein kinase activated protein kinase 5;p38-regulated/activated protein kinase;PRAK;MAPKAP-K5;MK-5;MK5
Observed Band	60kD
Calculated Molecular Weight	60kD
Cell Pathway	Cytoplasm. Nucleus. Translocates to the cytoplasm following phosphorylation and activation. Interaction with ERK3/MAPK6 or ERK4/MAPK4 and phosphorylation at Thr-182, activates the protein kinase activity, followed by translocation to the cytoplasm. Phosphorylation by PKA/PRKACA at Ser-115 also induces nuclear export.
Tissue Specificity	Expressed ubiquitously.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:p38 alpha and beta-dependent phosphorylation increases its activity. Activated by stress-related extracellular stimuli; such as H(2)O(2), arsenite, anisomycin TNF alpha and also PMA and the calcium ionophore A23187; but to a lesser extent. In vitro, activated by SQSTM1.,function:Mediates stress-induced



small heat shock protein 27 phosphorylation.,PTM:Phosphorylated on Thr-182; which is the regulatory phosphorylation site and is located on the T-loop/loop 12., similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subcellular location:Also observed in the nucleus.,subunit:Interacts with SQSTM1.,tissue specificity:Expressed ubiquitously.,

Background

The protein encoded by this gene is a tumor suppressor and member of the serine/threonine kinase family. In response to cellular stress and proinflammatory cytokines, this kinase is activated through its phosphorylation by MAP kinases including MAPK1/ERK, MAPK14/p38-alpha, and MAPK11/p38-beta. The encoded protein is found in the nucleus but translocates to the cytoplasm upon phosphorylation and activation. This kinase phosphorylates heat shock protein HSP27 at its physiologically relevant sites. Two alternately spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Nov 2012],

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

