

PRAK (phospho Thr182) Polyclonal Antibody

Catalog No: YP0820

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: MAPKAPK5

Fields: >>MAPK signaling pathway

Gene Name: MAPKAPK5

Protein Name: MAP kinase-activated protein kinase 5

Q8IW41

O54992

Human Gene Id: 8550

Human Swiss Prot

No:

Mouse Gene Id: 17165

Mouse Swiss Prot

No:

Immunogen : The antiserum was produced against synthesized peptide derived from human

MAPKAPK5 around the phosphorylation site of Thr182. AA range:148-197

Specificity: Phospho-PRAK (T182) Polyclonal Antibody detects endogenous levels of PRAK

protein only when phosphorylated at T182.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 60kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;

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],

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.,

Subcellular Location : Cytoplasm. Nucleus. Translocates to the cytoplasm following phosphorylation

and activation. Interaction with ERK3/MAPK6 or ERK4/MAPK4 and

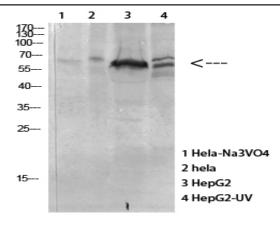
phosphorylation at Thr-182, activates the protein kinase activity, followed by translocation to the cytoplasm. Phosphorylation by PKA/PRKACA at Ser-115 also

induces nuclear export.

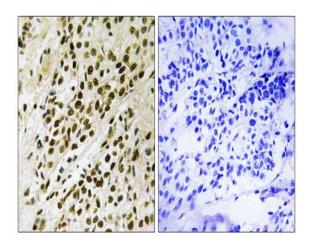
Expression: Expressed ubiquitously.

Products Images

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Western Blot analysis of various cells using Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MAPKAPK5 (Phospho-Thr182) Antibody. The picture on the right is blocked with the phospho peptide.