磷酸化 p38 调节/激活蛋白激酶抗体

产品货号： mIR5504

英文名称： phospho-MAPKAPK5 (Thr182)

中文名称： 磷酸化 p38 调节/激活蛋白激酶抗体

别　　名： p-PRAK(phospho Thr182); MAPKAPK5(phospho T182); MAP kinase-activated protein kinase 5; MAPKAP kinase 5; MAPKAPK5; mitogen-activated protein kinase-activated protein kinase 5; p38-regulated/activated protein kinase.

产品类型： 磷酸化抗体

研究领域： 肿瘤　免疫学　信号转导　转录调节因子　激酶和磷酸酶

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需

做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 52kDa

细胞定位： 细胞核 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated Synthesised phosphopeptide derived from human MAPKAPK5 around the phosphorylation site of Thr182:LM(p-T)PQ

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： 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**

产品介绍 background:

The serine/threonine kinase PRAK is activated in response to cellular stress and proinflammatory cytokines, through its phosphorylation by MAP kinases including MAPK1/ERK, MAPK14/p38 alpha, and MAPK11/p38 beta. PRAK has been reported to have a putative tumor suppressor function by mediating senescence upon activation by p38 in response to oncogenic ras. It is thought that phosphorylation of p53 by PRAK following activation of p38 MAPK by ras plays an important role in ras induced senescence and tumor suppression.

Function:

Tumor suppressor serine/threonine-protein kinase involved in mTORC1 signaling and post-transcriptional regulation. Phosphorylates FOXO3, ERK3/MAPK6, ERK4/MAPK4, HSP27/HSPB1, p53/TP53 and RHEB. Acts as a tumor suppressor by mediating Ras-induced senescence and phosphorylating p53/TP53. Involved in post-transcriptional regulation of MYC by mediating phosphorylation of FOXO3: phosphorylation of FOXO3 leads to promote nuclear localization of FOXO3, enabling expression of miR-34b and miR-34c, 2 post-transcriptional regulators of MYC that bind to the 3'UTR of MYC transcript and prevent MYC translation. Acts as a negative regulator of mTORC1 signaling by mediating phosphorylation and inhibition of RHEB. Part of the atypical MAPK signaling via its interaction with ERK3/MAPK6 or ERK4/MAPK4: the precise role of the complex formed with ERK3/MAPK6 or ERK4/MAPK4 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPK (ERK3/MAPK6 or ERK4/MAPK4), ERK3/MAPK6 (or ERK4/MAPK4) is phosphorylated and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6 (or ERK4/MAPK4). Mediates phosphorylation of HSP27/HSPB1 in response to PKA/PRKACA stimulation, inducing F-actin rearrangement.

Subunit:

Interacts with ERK3/MAPK6 and ERK4/MAPK4 (via FRIEDE motif); the interaction is direct. Interacts with YWHAE; the interaction prevents phosphorylation of HSP27/HSPB1 leading to disrupt F-actin polymerization. Interacts with SQSTM1.

Subcellular Location:

Cytoplasm. Nucleus.

Tissue Specificity:

Expressed ubiquitously.

Post-translational modifications:

Phosphorylated on Thr-182 ERK3/MAPK6 or ERK4/MAPK4; which is the regulatory phosphorylation site and is located on the T-loop/loop 12, leading to activation. Phosphorylation at Thr-182 by p38-alpha/MAPK14, p38-beta/MAPK11 is subject to debate. Phosphorylated at Ser-115 by PKA/PRKACA, leading to localization to the cytoplasm. Autophosphorylated (By similarity).

Similarity:

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

Contains 1 protein kinase domain.

SWISS:

Q8IW41

Gene ID:

8550

Important Note:

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

产品图片