磷酸化 p21 激活激酶 3 抗体

产品货号： mlR1655

英文名称： phospho-PAK3 (Ser139)

中文名称： 磷酸化 p21 激活激酶 3 抗体

别　　名： PAK3_HUMAN; Beta PAK; bPAK; CDKN1A; hPAK3; Mental retardation X linked 30; MRX30; MRX47; Oligophrenin 3; OPHN3; p21 activated kinase 3; p21 CDKN1A activated kinase 3; PAK-3; PAK3 p21 protein (Cdc42/Rac)-activated kinase 3; PAK3beta; Pak65alpha; Pak65beta; Serine threonine protein kinase PAK 3; Stk4.

产品类型： 磷酸化抗体

研究领域： 细胞生物　神经生物学　信号转导　激酶和磷酸酶　G 蛋白信号

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应　： Human, Mouse, Rat, Dog, 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： 62kDa

细胞定位： 细胞膜

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原 ： KLH conjugated Synthesised phosphopeptide derived from human PAK3 around the phosphorylation site of Ser139:YM(p-S)FT

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 ： The p21 activated kinases (PAK) are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. The PAK proteins are a family of serine/threonine kinases that serve as targets for the small GTP binding proteins, CDC42 and RAC1, and have been implicated in a wide range of biological activities. The protein encoded by this gene is activated by proteolytic cleavage during caspase-mediated apoptosis, and may play a role in regulating the apoptotic events in the dying cell.

P21-activated kinase (PAK) is actually a family of serine/threonine protein kinases, members of which are activated by small molecular weight GTPases. The three most common isoforms are PAK 1, PAK 2, and PAK 3 (also known as alpha PAK, gamma PAK, and beta PAK, respectively). These kinases contain numerous regulatory elements that trigger diverse signaling processes such as those initiated by activated GTPases, interaction with Src homology 3 (SH3) domains, and caspase mediated proteolytic cleavage. Autophosphorylation of serine 141 (serine 144 for PAK 1 and serine 139 PAK 3), catalyzed by Cdc42, is required for activation of PAK.

Function:

Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, or cell cycle regulation. Plays a role in dendrite spine morphogenesis as well as synapse formation and plasticity. Acts as downstream effector of the small GTPases CDC42 and RAC1. Activation by the binding of active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates MAPK4 and MAPK6 and

activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration. Additionally, phosphorylates TNNI3/troponin I to modulate calcium sensitivity and relaxation kinetics of thin myofilaments.

Subunit:

Interacts tightly with GTP-bound but not GDP-bound CDC42/p21 and RAC1. Shows highly specific binding to the SH3 domains of phospholipase C-gamma and of adapter protein NCK. Interacts with the C-terminal of APP (By similarity). Interacts with ARHGEF6 and ARHGEF7.

Subcellular Location:

Cytoplasm (By similarity).

Tissue Specificity:

Restricted to the nervous system. Highly expressed in postmitotic neurons of the developing and postnatal cerebral cortex and hippocampus.

Post-translational modifications:

Autophosphorylated when activated by CDC42/p21.

DISEASE:

Mental retardation, X-linked 30 (MRX30) [MIM:300558]: A disorder characterized by significantly below average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. Intellectual deficiency is the only primary symptom of non-syndromic X-linked mental retardation, while syndromic mental retardation presents with associated physical, neurological and/or psychiatric manifestations. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.

Contains 1 CRIB domain.

Contains 1 protein kinase domain.

SWISS:

Q13153

Gene ID:

5058

Important Note:

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

PAK1-3 蛋白具有广泛的生物学功能,也是一个保守的丝氨酸/苏氨酸蛋白激酶,参与许多重要的细胞活动。包括细胞骨架的动力学调节,细胞移动,生存和凋亡,细胞周期,基因转录调节,细胞生长信号转导和转化等。