abcam

Product datasheet

Recombinant human PAK2 protein ab95310

2 图像

描述

产品名称 重组人PAK2蛋白

生物活性 86 nmoles/min/μg Analysis of enzymatic activity: 1. Different concentrations of PAK2 were

incubated in a buffer containing 50 mM HEPES (pH7.5), 10 mM MgCl2, 1 mM EGTA, 200 μ M ATP, 0.01% Brij-35, and 2 μ M substrate (SER/THR 20) at room temperature for 1 hour. 2. Developer solution was added to reaction and reaction was stopped after 1h of incubation at RT.

3. Fluorescence was detected using ?exc=460 \pm 40 nm and ?em=528 \pm 20 nm filters.

纯**度** > 90 % SDS-PAGE.

表达系统 Escherichia coli

Accession Q13177

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

 种属
 Human

 预测分子量
 33 kDa

 氨基酸
 227 to 524

技术指标

Our Abpromise guarantee covers the use of ab95310 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 Functional Studies

形式 Liquid

制备和贮存

稳定性和存储 Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.077% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.395% Tris HCl, 10% Glycerol

(glycerin, glycerine), 0.87% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

功能

The activated kinase acts on a variety of targets. Phosphorylates ribosomal protein S6, histone H4 and myelin basic protein. Full length PAK 2 stimulates cell survival and cell growth. The process is, at least in part, mediated by phosphorylation and inhibition of pro-apoptotic BAD. Caspase-activated PAK-2p34 is involved in cell death response, probably involving the JNK signaling pathway. Cleaved PAK-2p34 seems to have a higher activity than the CDC42-activated form.

组织特异性

Ubiquitously expressed. Higher levels seen in skeletal muscle, ovary, thymus and spleen.

序列相似性

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

Contains 1 CRIB domain.

Contains 1 protein kinase domain.

翻译后修饰

Full length PAK 2 is autophosphorylated when activated by CDC42/p21. Following cleavage, both peptides, PAK-2p27 and PAK-2p34, become highly autophosphorylated, with PAK-2p27 being phosphorylated on serine and PAK-2p34 on threonine residues, respectively.

Autophosphorylation of PAK-2p27 can occur in the absence of any effectors and is dependent on phosphorylation of Thr-402, because PAK-2p27 is acting as an exogenous substrate.

During apoptosis proteolytically cleaved by caspase-3 or caspase-3-like proteases to yield active PAK-2p34.

Ubiquitinated, leading to its proteasomal degradation.

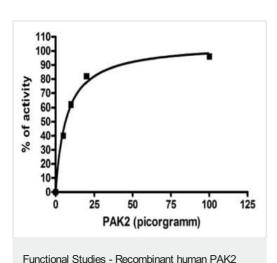
PAK-2p34 is myristoylated.

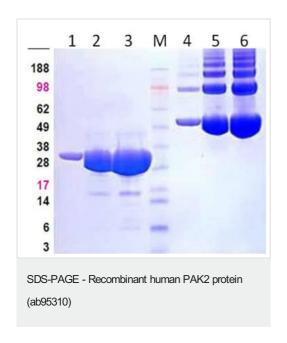
细胞定位

Cytoplasm and Nucleus. Cytoplasm > perinuclear region. Membrane. Interaction with ARHGAP10 probably changes PAK-2p34 location to cytoplasmic perinuclear region. Myristoylation changes PAK-2p34 location to the membrane.

图片

protein (ab95310)





SDS-PAGE analysis of PAK2 (ab95310) and BSA

1, 2, 3: ab95310 at 6, 60 and 120ug/ml

4, 5, 6: BSA at 5, 50, 100ug/ml

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