

### Anti-PYK2 (phospho Y402) antibody ab4800

**13 References**   **6 图像**

#### 概述

产品名称	Anti-PYK2 (phospho Y402)抗体
描述	兔多克隆抗体to PYK2 (phospho Y402)
宿主	Rabbit
经测试应用	适用于: IHC-P, ICC/IF, WB
种属反应性	与反应: Mouse, Human
免疫原	Synthetic peptide corresponding to Human PYK2 (phospho Y402). The sequence is conserved in human and rat.
阳性对照	IHC-P: Human brain tissue, human lung adenocarcinoma, mouse brain tissue, human hepatocarcinoma tissue. ICC/IF: Mouse mammary (NmuMG) cells, A549 cells.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	<p>pH: 7.30</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol, 0.1% BSA</p> <p>BSA is IgG and protease free</p>
纯度	Immunogen affinity purified
纯化说明	Purified from rabbit serum by epitope specific chromatography. The antibody has been negatively pre-adsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated PYK 2. The final product is generated by

affinity chromatography using a PYK 2-derived peptide that is phosphorylated at tyrosine 402.

克隆  
同种型

多克隆  
IgG

## 应用

**The Abpromise guarantee** **Abpromise™**承诺保证使用ab4800于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		
ICC/IF		
WB		

## 应用说明

IHC-Fr: Use at an assay dependent dilution.  
WB: 1/1000. Predicted molecular weight: 116 kDa. Can be blocked with **PYK2 peptide - phospho Y402 (phospho and non-phospho pair)** or **CEF whole cell lysate, positive / negative for PYK 2 (pair)**.  
ICC/IF: Use at an assay dependent dilution from (PubMed:17325207).  
Not tested in other applications.  
Optimal dilutions/concentrations should be determined by the end user.

## 靶标

### 功能

Involved in calcium induced regulation of ion channel and activation of the map kinase signaling pathway. May represent an important signaling intermediate between neuropeptide activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. Interacts with the SH2 domain of Grb2. May phosphorylate the voltage-gated potassium channel protein Kv1.2. Its activation is highly correlated with the stimulation of c-Jun N-terminal kinase activity. Involved in osmotic stress-dependent SNCA 'Tyr-125' phosphorylation. In concert with SRC, plays an important role in osteoclastic bone resorption. Both the formation of a SRC-PTK2B complex, and SRC kinase activity are necessary for this function. The Tyr-402 phosphorylated form serves as a docking site for SRC and is important for the organization of the osteoclast actin cytoskeleton and attachment sites and for bone resorption.

### 组织特异性

Most abundant in the brain, with highest levels in amygdala and hippocampus. Low levels in kidney. Also expressed in spleen and lymphocytes.

### 序列相似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily.  
Contains 1 FERM domain.  
Contains 1 protein kinase domain.

### 翻译后修饰

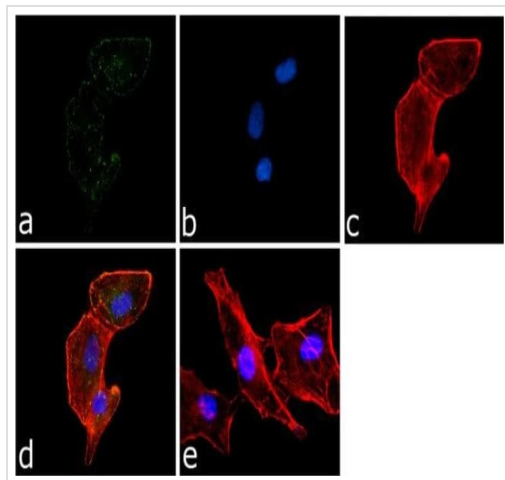
Phosphorylated on tyrosine residues in response to various stimuli that elevate the intracellular calcium concentration, as well as by PKC activation. Recruitment by nephrocystin to cell matrix adhesions initiates Tyr-402 phosphorylation. In monocytes, adherence to substrata is required for tyrosine phosphorylation and kinase activation. Angiotensin II, thapsigargin and L-alpha-lysophosphatidic acid (LPA) also induce autophosphorylation and increase kinase activity.

### 细胞定位

Cytoplasm. Cell membrane. Interaction with nephrocystin induces the membrane-association of

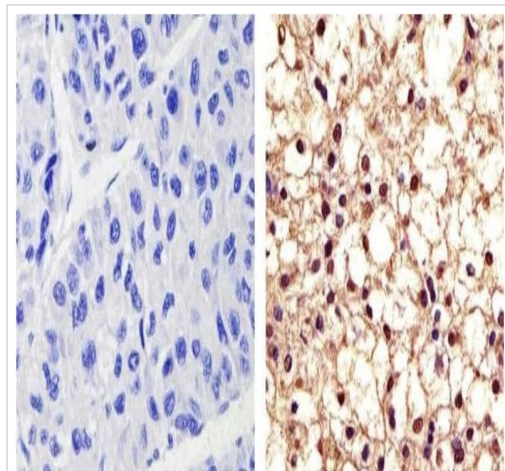
the kinase.

## 图片



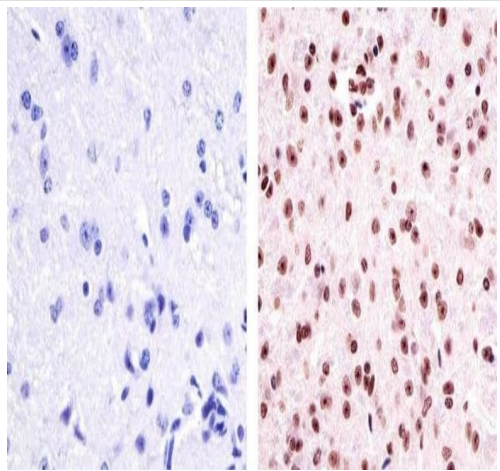
Immunocytochemistry/ Immunofluorescence - Anti-PYK2 (phospho Y402) antibody (ab4800)

A549 cells stained for PYK2 (green) using ab4800 at 1/500 dilution in ICC/IF. Followed by Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at 1/2000 dilution for 45 minutes at room temperature (Panel a). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin at 1/300 dilution. Panel d is a merged image showing cytoplasmic localization. Panel e is a no primary antibody control.



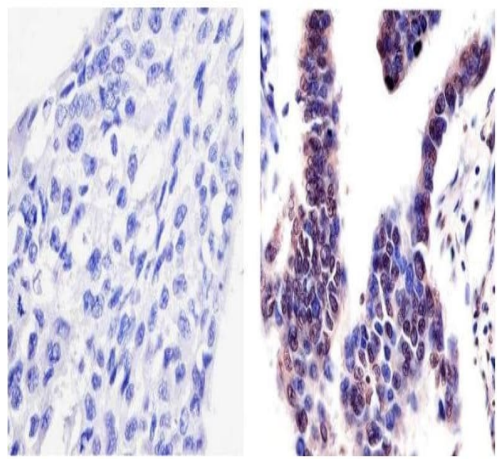
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)

Paraffin embedded human hepatocarcinoma tissue (right) stained for PYK2 using ab4800 at 1/50 dilution in immunohistochemical analysis. Negative control (left) without primary antibody.



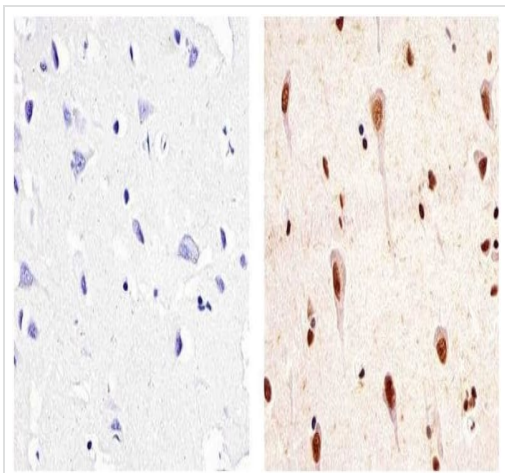
Paraffin embedded Mouse brain tissue (right) stained for PYK2 using ab4800 at 1/20 dilution in immunohistochemical analysis. Negative control (left) without primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)



Paraffin embedded human lung adenocarcinoma tissue(right) stained for PYK2 using ab4800 at 1/20 dilution in immunohistochemical analysis. Negative control (left) without primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)



Paraffin embedded human brain tissue (right) stained for PYK2 using ab4800 at 1/50 dilution in immunohistochemical analysis. Negative control (left) without primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)

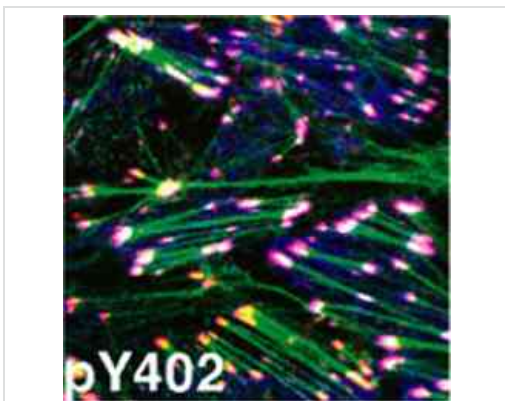


Figure shows Pyk2 staining: Normal mouse mammary (NmuMG) cells were treated with TGFbeta and then grown to confluence, fixed and permeabilized. ab4800 was identified using a selective PSSA followed by incubation with a Cy3-conjugated anti-rabbit secondary antibody (red). F actin was visualized with Oregon Green-conjugated phalloidin (green) and paxillin staining is indicated in blue. The merged image indicates colocalization (purple) of ab4800, F-actin and paxillin in focal adhesion structures.

Immunocytochemistry/ Immunofluorescence - Anti-PYK2 (phospho Y402) antibody (ab4800)

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