# abcam

#### Product datasheet

## Anti-PYK2 (phospho Y402) antibody ab4800

13 References 画像数 6

製品の概要

製品名 Anti-PYK2 (phospho Y402) antibody

製品の詳細 Rabbit polyclonal to PYK2 (phospho Y402)

由来種 Rabbit

アプリケーション 適用あり: IHC-P, ICC/IF, WB

種交差性 交差種: Mouse, Human

免疫原 Synthetic peptide corresponding to Human PYK2 (phospho Y402). The sequence is conserved in

human and rat.

ポジティブ・コントロール IHC-P: Human brain tissue, human lung adenocarcinoma, mouse brain tissue, human

hepatocarcinoma tissue. ICC/IF: Mouse mammary (NmuMG) cells, A549 cells.

特記事項

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.

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&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**バッファー** pH: 7.30

Preservative: 0.05% Sodium azide

Constituents: PBS, 50% Glycerol, 0.1% BSA

BSA is IgG and protease free

精製度 Immunogen affinity purified

特記事項(精製) 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.

ポリ/モノ ポリクローナル

アイソタイプ IgG

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab4800の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		
ICC/IF		
WB		

追加情報 IHC-Fr: Use at an assay dependent dilution.

WB: 1/1000. Predicted molecular weight: 116 kDa. Can be blocked with <u>PYK2 peptide</u> - <u>phospho Y402 (phospho and non-phospho pair)</u> or <u>CEF whole cell lysate, positive / negative for PYK 2 (pair)</u>.

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.

#### ターゲット情報

機能

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.

組織特異性

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

配列類似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily.

Contains 1 FERM domain.

Contains 1 protein kinase domain.

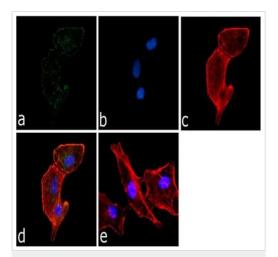
翻訳後修飾

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-alphalysophosphatidic acid (LPA) also induce autophosphorylation and increase kinase activity.

細胞内局在

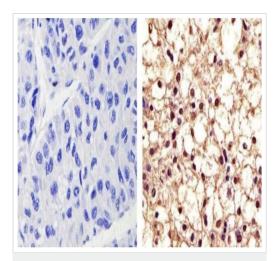
Cytoplasm. Cell membrane. Interaction with nephrocystin induces the membrane-association of

#### 画像



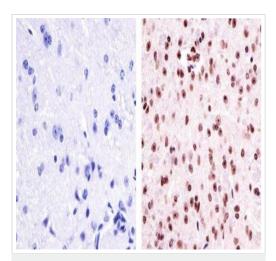
Immunocytochemistry/ Immunofluorescence - Anti-PYK2 (phospho Y402) antibody (ab4800)

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.



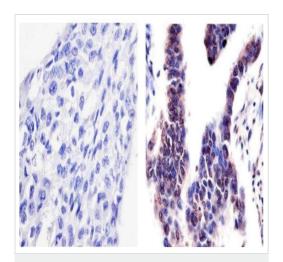
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)

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



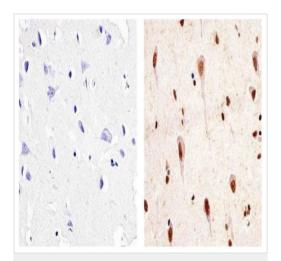
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)

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



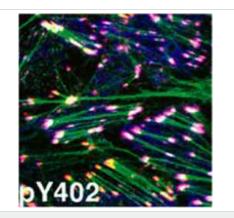
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PYK2 (phospho Y402) antibody (ab4800)

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 paraffinembedded 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.



Immunocytochemistry/ Immunofluorescence - 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 Greenconjugated phalloiden (green) and paxillin staining is indicated in blue. The merged image indicates colocalization (purple) of ab4800, F-actin and paxillin in focal adhesion structures.

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