bs-3400R **[Primary Antibody]**

phospho-PYK2 (Tyr402) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 2185 **SWISS:** Q14289

Target: PYK2 (Tyr402)

Immunogen: KLH conjugated synthesised phosphopeptide derived from human Pyk2 around the phosphorylation site of Tyr402: DI(p-Y)AE.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced regulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. The encoded protein undergoes rapid tyrosine phosphorylation and activation in response to increases in the intracellular calcium concentration, nicotinic acetylcholine receptor activation, membrane depolarization, or protein kinase C activation. This protein has been shown to bind CRK-associated substrate, nephrocystin, GTPase regulator associated with FAK, and the SH2 domain of GRB2. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Four transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

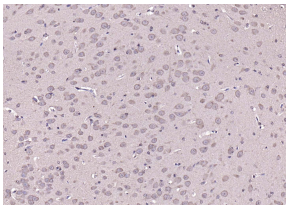
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Cow, Dog, Horse)

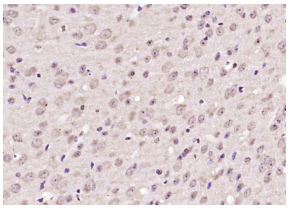
Predicted MW.: 116 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PYK2 (Tyr402)) Polyclonal Antibody, Unconjugated (bs-3400R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-PYK2 (Tyr402)) Polyclonal Antibody, Unconjugated (bs-3400R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

SELECTED CITATIONS

- **[IF=11.161]** Huang, Chengmei. et al. Tumor cell-derived SPON2 promotes M2-polarized tumor-associated macrophage

infiltration and cancer progression by activating PYK2 in CRC. J Exp Clin Canc Res. 2021 Dec;40(1):1-17 WB ;human. 34583750

- **[IF=5.191]** Zuocheng Qiu. et al. Puerarin specifically disrupts osteoclast activation via blocking integrin-β3 Pyk2/Src/Cbl signaling pathway. J Orthop Transl. 2022 Mar;33:55 WB ;Mouse. 10.1016/j.jot.2022.01.003
- **[IF=5.307]** Jian Song. et al. The dual FAK-HDAC inhibitor MY-1259 displays potent activities in gastric cancers in vitro and in vivo. BIOORG CHEM. 2023 Feb;131:106328 WB ;Human. 36542986
- **[IF=4.46]** Cao, Hui-Juan, et al. "Src blockage by siRNA inhibits VEGF-induced vascular hyperpemeability and osteoclast activity–an< i> in vitro</i> mechanism study for preventing destructive repair of osteonecrosis." Bone (2014). WB ;="Mouse". 25554601