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Datasheet for ABIN6243517

## anti-PTK2B antibody (C-Term)

### 3 Images

#### Overview

Quantity:	400 µL
Target:	PTK2B
Binding Specificity:	AA 805-838, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PTK2B antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (IF)

#### Product Details

Immunogen:	This PTK2B antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 805-838 amino acids from the C-terminal region of human PTK2B.
Clone:	RB50594
Isotype:	Ig Fraction
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Target Details

Target:	PTK2B
Alternative Name:	PTK2B ( <a href="#">PTK2B Products</a> )

## Target Details

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**Background:** Non-receptor protein-tyrosine kinase that regulates reorganization of the actin cytoskeleton, cell polarization, cell migration, adhesion, spreading and bone remodeling. Plays a role in the regulation of the humoral immune response, and is required for normal levels of marginal B-cells in the spleen and normal migration of splenic B-cells. Required for normal macrophage polarization and migration towards sites of inflammation. Regulates cytoskeleton rearrangement and cell spreading in T- cells, and contributes to the regulation of T-cell responses. Promotes osteoclastic bone resorption, this requires both PTK2B/PYK2 and SRC. May inhibit differentiation and activity of osteoprogenitor cells. Functions in signaling downstream of integrin and collagen receptors, immune receptors, G-protein coupled receptors (GPCR), cytokine, chemokine and growth factor receptors, and mediates responses to cellular stress. Forms multisubunit signaling complexes with SRC and SRC family members upon activation, this leads to the phosphorylation of additional tyrosine residues, creating binding sites for scaffold proteins, effectors and substrates. Regulates numerous signaling pathways. Promotes activation of phosphatidylinositol 3-kinase and of the AKT1 signaling cascade. Promotes activation of NOS3. Regulates production of the cellular messenger cGMP. Promotes activation of the MAP kinase signaling cascade, including activation of MAPK1/ERK2, MAPK3/ERK1 and MAPK8/JNK1. Promotes activation of Rho family GTPases, such as RHOA and RAC1. Recruits the ubiquitin ligase MDM2 to P53/TP53 in the nucleus, and thereby regulates P53/TP53 activity, P53/TP53 ubiquitination and proteasomal degradation. Acts as a scaffold, binding to both PDPK1 and SRC, thereby allowing SRC to phosphorylate PDPK1 at 'Tyr-9', 'Tyr-373', and 'Tyr-376'. Promotes phosphorylation of NMDA receptors by SRC family members, and thereby contributes to the regulation of NMDA receptor ion channel activity and intracellular Ca(2+) levels. May also regulate potassium ion transport by phosphorylation of potassium channel subunits. Phosphorylates SRC, this increases SRC kinase activity. Phosphorylates ASAP1, NPHP1, KCNA2 and SHC1. Promotes phosphorylation of ASAP2, RHOU and PXN, this requires both SRC and PTK2/PYK2.

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**Molecular Weight:** 115875

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**UniProt:** [Q14289](#)

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**Pathways:** [EGFR Signaling Pathway](#), [Regulation of Actin Filament Polymerization](#), [Carbohydrate Homeostasis](#), [Glycosaminoglycan Metabolic Process](#), [Cellular Glucan Metabolic Process](#), [Cell-Cell Junction Organization](#), [Regulation of Cell Size](#), [Regulation of Carbohydrate Metabolic Process](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [CXCR4-mediated Signaling Events](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Signaling of Hepatocyte Growth Factor Receptor](#), [Positive Regulation of fat Cell Differentiation](#), [VEGF Signaling](#)

## Application Details

Application Notes: IF: 1:25. WB: 1:1000. IHC-P: 1:25

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

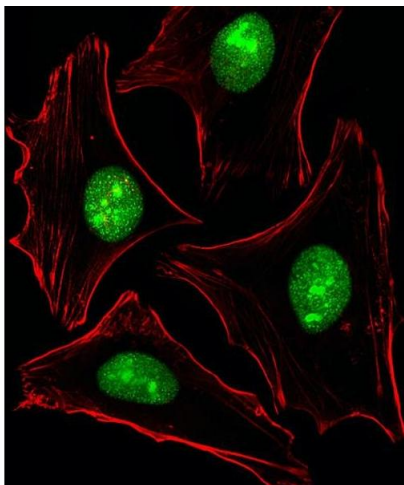
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

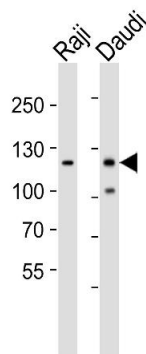
Expiry Date: 6 months

## Images



### Immunofluorescence

**Image 1.** Fluorescent image of HeLa cells stained with XAF1 PTK2B Antibody (C-term) (ABIN6243517 and ABIN6577462). (ABIN6243517 and ABIN6577462) was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



### Western Blotting

**Image 2.** Western blot analysis of lysates from Raji, Daudi cell line (from left to right), using PTK2B Antibody (C-term) (ABIN6243517 and ABIN6577462). (ABIN6243517 and ABIN6577462) was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35 µg per lane.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Immunohistochemical analysis of paraffin-embedded H.brain section using PTK2B Antibody (C-term) (ABIN6243517 and ABIN6577462). (ABIN6243517 and ABIN6577462) was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.