

Datasheet for ABIN1713614  
**anti-PTK6 antibody (pTyr447)**[Go to Product page](#)

## 1 Publication

## Overview

Quantity:	100 µL
Target:	PTK6
Binding Specificity:	pTyr447
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PTK6 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

## Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human Brk around the phosphorylation site of Tyr447 [TS(p-Y)EN]
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Purified by Protein A.

## Target Details

Target:	PTK6
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## Target Details

Alternative Name:	Brk ( <a href="#">PTK6 Products</a> )
Background:	<p>Synonyms: BRK, Protein-tyrosine kinase 6, Breast tumor kinase, Tyrosine-protein kinase BRK, PTK6</p> <p>Background: Non-receptor tyrosine-protein kinase implicated in the regulation of a variety of signaling pathways that control the differentiation and maintenance of normal epithelia, as well as tumor growth. Function seems to be context dependent and differ depending on cell type, as well as its intracellular localization. A number of potential nuclear and cytoplasmic substrates have been identified. These include the RNA-binding proteins: KHDRBS1/SAM68, KHDRBS2/SLM1, KHDRBS3/SLM2 and SFPQ/PSF, transcription factors: STAT3 and STAT5A/B and a variety of signaling molecules: ARHGAP35/p19RhoGAP, PXN/paxillin, BTK/ATK, STAP2/BKS. Associates also with a variety of proteins that are likely upstream of PTK6 in various signaling pathways, or for which PTK6 may play an adapter-like role. These proteins include ADAM15, EGFR, ERBB2, ERBB3 and IRS4. In normal or non-tumorigenic tissues, PTK6 promotes cellular differentiation and apoptosis. In tumors PTK6 contributes to cancer progression by sensitizing cells to mitogenic signals and enhancing proliferation, anchorage-independent survival and migration/invasion. Association with EGFR, ERBB2, ERBB3 may contribute to mammary tumor development and growth through enhancement of EGF-induced signaling via BTK/AKT and PI3 kinase. Contributes to migration and proliferation by contributing to EGF-mediated phosphorylation of ARHGAP35/p19RhoGAP, which promotes association with RASA1/p12RasGAP, inactivating RhoA while activating RAS. EGF stimulation resulted in phosphorylation of PNK/Paxillin by PTK6 and activation of RAC1 via CRK/CrKII, thereby promoting migration and invasion. PTK6 activates STAT3 and STAT5B to promote proliferation. Nuclear PTK6 may be important for regulating growth in normal epithelia, while cytoplasmic PTK6 might activate oncogenic signaling pathways. Isoform 2 inhibits PTK6 phosphorylation and PTK6 association with other tyrosine-phosphorylated proteins.</p>
Gene ID:	5753
UniProt:	<a href="#">Q13882</a>

## Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500

## Application Details

IF(IHC-P) 1:50-200

IF(IHC-F) 1:50-200

IF(ICC) 1:50-200

ICC 1:100-500

Restrictions: For Research Use only

## Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

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

Storage: 4 °C,-20 °C

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

## Publications

Product cited in: Akl, Foudah, Ebrahim, Meyer, El Sayed: "The marine-derived sipholenol A-4-O-3',4'-dichlorobenzoate inhibits breast cancer growth and motility in vitro and in vivo through the suppression of Brk and FAK signaling." in: **Marine drugs**, Vol. 12, Issue 4, pp. 2282-304, (2014) ([PubMed](#)).