

Datasheet for ABIN1700112

anti-PTK6 antibody (pTyr447) (Biotin)



Overview	V
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Overview	
Quantity:	100 μL
Target:	PTK6
Binding Specificity:	pTyr447
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PTK6 antibody is conjugated to Biotin
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), 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
Alternative Name:	Brk (PTK6 Products)

Background:

Synonyms: BRK, Protein-tyrosine kinase 6, Breast tumor kinase, Tyrosine-protein kinase BRK, PTK6

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, anchorageindependent 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 PNX/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.

Gene ID:

5753

UniProt:

Q13882

Application Details

Application Notes:

WB 1:300-5000

IHC-P 1:200-400

IHC-F 1:100-500

Restrictions:

For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % 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:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months