

Product name:	Brk (phospho Tyr447) Rabbit Polyclonal Antibody
Cat number:	ABN04334
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Breast Tumor Kinase around the phosphorylation site of Tyr447. AA range:402-451
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight:	50kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

protein tyrosine kinase 6(PTK6) Homo sapiens The protein encoded by this gene is a cytoplasmic nonreceptor protein kinase which may function as an intracellular signal transducer in epithelial tissues. Overexpression of this gene in mammary epithelial cells leads to sensitization of the cells to epidermal growth factor and results in a partially transformed phenotype. Expression of this gene has been detected at low levels in some breast tumors but not in normal breast tissue. The encoded protein has been shown to undergo autophosphorylation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2012],catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,enzyme regulation:Activated enzyme seems to have greater access to its substrates.,function:Phosphorylates KHDRBS1, KHDRBS2, KHDRBS3 and STAP2/BKS. May function as an intracellular signal transducer in epithelial tissues. Overexpression in mammary cells leads to mitogenically sensitization to EGF, and results in a partially transformed phenotype. Its presence in the nucleus appears to be linked to suppression of tumor progression.,PTM:Autophosphorylated. The phosphorylation of Tyr-447 may lead to the autoinhibition of the enzyme.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. BRK/PTK6/SIK subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 SH2 domain.,similarity:Contains 1 SH3 domain.,subcellular location:Colocalizes with KHDRBS1, KHDRBS2 or KHDRBS3, within the nucleus. In secretory epithelial cells from prostate adenocarcinoma, nuclear localization is higher in low-grade and lower in high-grade regions of the tumors.,subunit:Interacts with GAP-A.p65 (By similarity). Interacts with KHDRBS1. Interacts with phosphorylated IRS4.,tissue specificity:Epithelia-specific. Very high level in colon and high levels in small intestine and prostate, and low levels in some fetal tissues. Expressed at low level in some breast tumors, but not in normal breast. Also found in melanocytes. Not expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.,