



# Brk (phospho Tyr447) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14419
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IF;ELISA
<b>Gene Name</b>	PTK6
<b>Protein Name</b>	Protein-tyrosine kinase 6
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Breast Tumor Kinase around the phosphorylation site of Tyr447. AA range:402-451
<b>Specificity</b>	Phospho-Brk (Y447) Polyclonal Antibody detects endogenous levels of Brk protein only when phosphorylated at Y447.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PTK6; BRK; Protein-tyrosine kinase 6; Breast tumor kinase; Tyrosine-protein kinase BRK
<b>Observed Band</b>	50kD
<b>Cell Pathway</b>	Cytoplasm. Nucleus. Cell projection, ruffle. Membrane . Colocalizes with KHDRBS1, KHDRBS2 or KHDRBS3, within the nucleus. Nuclear localization in epithelial cells of normal prostate but cytoplasmic localization in cancer prostate.
<b>Tissue Specificity</b>	Epithelia-specific. Very high level in colon and high levels in small intestine and prostate, and low levels in some fetal tissues. Not expressed in breast or ovarian tissue but expressed in high percentage of breast and ovarian cancers. Also overexpressed in some metastatic melanomas, lymphomas, colon cancers, squamous cell carcinomas and prostate cancers. Also found in melanocytes. Not expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform 2 is present in prostate epithelial cell lines derived from normal prostate and prostate adenocarcinomas, as well as in a variety of cell lines.
<b>Function</b>	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 o

### 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],

### matters needing attention

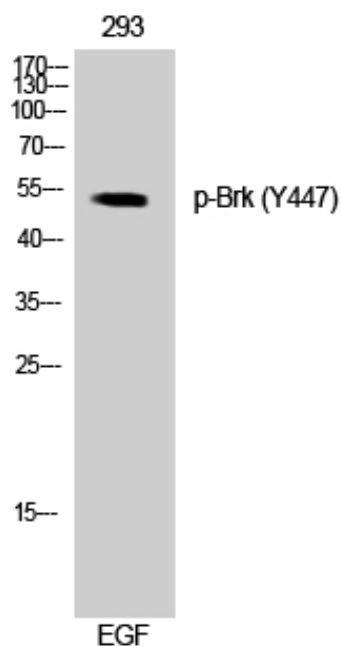
Avoid repeated freezing and thawing!

### Usage suggestions

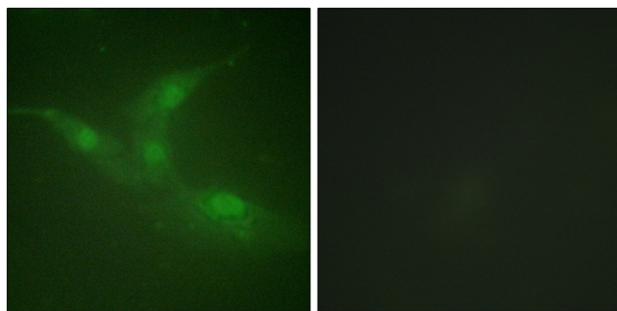
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



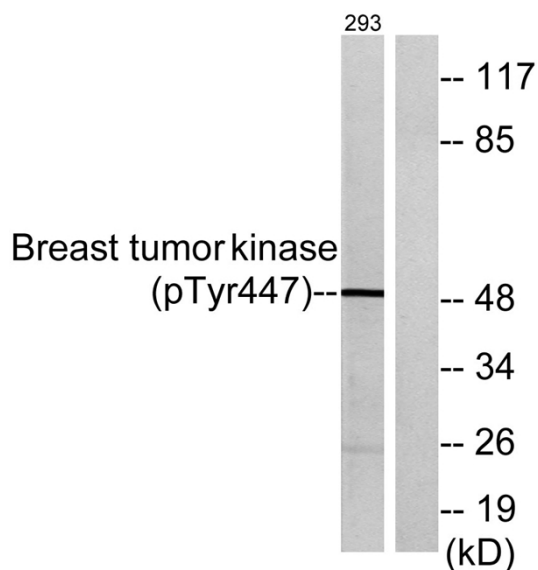
## Products Images



Western Blot analysis of 293 cells using Phospho-Brk (Y447) Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using Breast Tumor Kinase (Phospho-Tyr447) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with EGF 200ng/ml 30', using Breast Tumor Kinase (Phospho-Tyr447) Antibody. The lane on the right is blocked with the phospho peptide.