

Anti-FAK/PTK2 Antibody Picoband®

Catalog Number: PB9674

About PTK2

PTK2 protein tyrosine kinase 2 (PTK2), also known as Focal Adhesion Kinase (FAK), is a protein that, in humans, is encoded by the PTK2 gene. This gene encodes a cytoplasmic protein tyrosine kinase which is found concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Activation of this gene may be an important early step in cell growth and intracellular signal transduction pathways triggered in response to certain neural peptides or to cell interactions with the extracellular matrix. Several transcript variants encoding different isoforms have been found for this gene, but the full-length nature of only three of them have been determined.

Overview

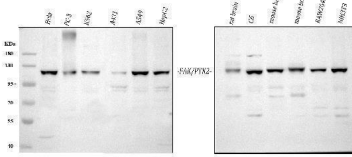
Product Name	Anti-FAK/PTK2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-FAK/PTK2 Antibody Picoband® catalog # PB9674. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q05397

Technical Details

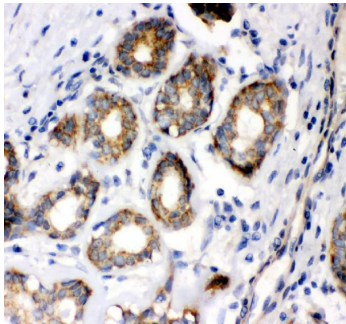
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PTK2, identical to the related mouse and rat sequences.
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Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

Anti-FAK/PTK2 Antibody Picoband® (PB9674) Images



Western blot analysis of FAK/PTK2 using anti-FAK/PTK2 antibody (PB9674). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human PC-3 whole cell lysates. Lane 3: human K562 whole cell lysates, Lane 4: human A431 whole cell lysates, Lane 5: human A549 whole cell lysates, Lane 6: human HepG2 whole cell lysates, Lane 7: rat brain tissue lysates, Lane 8: rat C6 whole cell lysates, Lane 9: mouse lung tissue lysates, Lane 10: mouse brain tissue lysates, Lane 11: mouse RAW264.7 whole cell lysates, Lane 12: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-FAK/PTK2 antigen affinity purified polyclonal antibody (Catalog # PB9674) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for FAK/PTK2 at approximately 125 kDa. The expected band size for FAK/PTK2 is at 119 kDa.



IHC analysis of FAK/PTK2 using anti-FAK/PTK2 antibody (PB9674). FAK/PTK2 was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-FAK/PTK2 Antibody (PB9674) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

2 Publications Citing This Product

1. PubMed ID: 24348806, Cao T, Xing Y, Yang Y, Mei H. Exp Ther Med. 2014 Jan;7(1):280-286. Epub 2013 Nov 13. Correlation Between Matrix Metalloproteinase Expression And Activation Of The Focal Adhesion Kinase Signaling Pathway In Herpes Stromal Keratitis.
2. PubMed ID: 25621028, Su Gq, Zhang Fx, Mao Hh, Liu Xw, Zheng Ys, Zhang Sy, Su Jj. Oncol Lett. 2015 Feb;9(2):595-603. Epub 2014 Nov 21. Research Of Shrnimir Inhibitory Effects Towards Focal Adhesion Kinase Expression In The Treatment Of Gastric Cancer.

Visit bosterbio.com/anti-fak-picoband-trade-antibody-pb9674-boster.html to see all 2 publications.

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