

Anti-FAK/PTK2 Antibody

Catalog Number: PA1574

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 natures of only three of them have been determined.

Overview

Product Name	Anti-FAK/PTK2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-FAK/PTK2 Antibody catalog # PA1574. Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
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 FAK, identical to the related rat and mouse sequences.
Predicted Reactive Species	Hamster
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

Anti-FAK/PTK2 Antibody (PA1574) Images

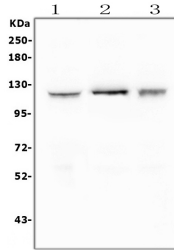


Figure 1. Western blot analysis of FAK using anti-FAK antibody (PA1574).

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 50ug of sample under reducing conditions.

Lane 1: human HEK293 whole cell lysates

Lane 2: human PC-3 whole cell lysates

Lane 3: human K562 whole cell lysates

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 antigen affinity purified polyclonal antibody (Catalog # PA1574) 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 1:10000 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 at approximately 119KD. The expected band size for FAK is at 119KD.

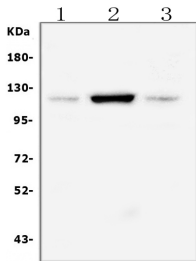


Figure 2. Western blot analysis of FAK using anti-FAK antibody (PA1574).

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 50ug of sample under reducing conditions.

Lane 1: rat heart tissue lysates

Lane 2: rat C6 whole cell lysates

Lane 3: mouse RAW246.7 whole cell lysates

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 antigen affinity purified polyclonal antibody (Catalog # PA1574) 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 1:10000 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 at approximately 119KD. The expected band size for FAK is at 119KD.

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-antibody-pa1574-boster.html to see all 2 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-FAK/PTK2 Antibody