

## OriGene Technologies, Inc.

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## **Product datasheet for TA506161**

## FAK (PTK2) Mouse Monoclonal Antibody [Clone ID: OTI4A8]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI4A8

**Applications:** IF, IHC, WB

Recommend Dilution: WB 1:4000, IHC 1:150, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PTK2(NP\_722560) produced in HEK293T

cell

**Formulation:** PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 119.1 kDa

**Gene Name:** protein tyrosine kinase 2

Database Link: NP 722560 Entrez Gene 5747 Human

**Background:** 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. [provided by RefSeq, Dec 2010]

Synonyms: FADK; FAK1; FRNK; p125FAK; pp125FAK; PPP1R71

**Protein Families:** Druggable Genome, Protein Kinase

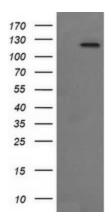




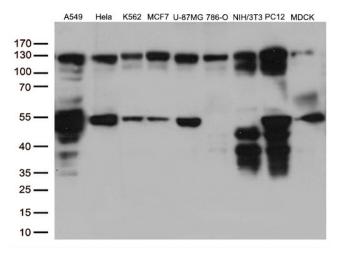
**Protein Pathways:** 

Axon guidance, Chemokine signaling pathway, ErbB signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer, VEGF signaling pathway

## **Product images:**

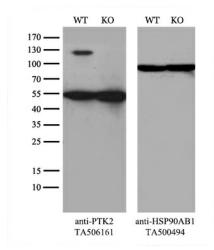


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PTK2 ([RC219839], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTK2. Positive lysates [LY403521] (100ug) and [LC403521] (20ug) can be purchased separately from OriGene.

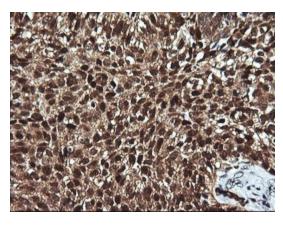


Western blot analysis of extracts (35ug) from 9 different cell by using anti-PTK2 monoclonal antibody (1:500).

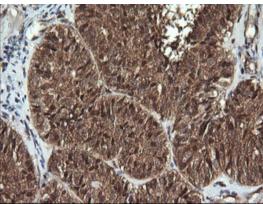




Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and PTK2-Knockout 293T cells (KO, Cat# [LC811213]) were separated by SDS-PAGE and immunoblotted with anti-PTK2 monoclonal antibody TA506161, (1:100). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control.

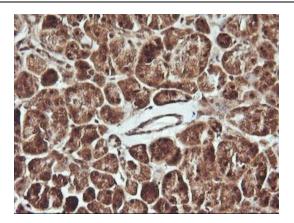


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-PTK2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA506161)

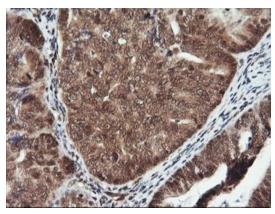


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-PTK2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA506161)

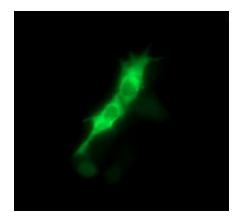




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PTK2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA506161)

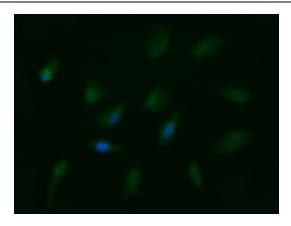


Immunohistochemical staining of paraffinembedded Carcinoma of Human pancreas tissue using anti-PTK2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA506161)



Anti-PTK2 mouse monoclonal antibody (TA506161) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PTK2 ([RC219839]).





Immunofluorescent staining of HeLa cells using anti-PTK2 mouse monoclonal antibody (TA506161).