

## Product datasheet for **CF506182**

### FAK (PTK2) Mouse Monoclonal Antibody [Clone ID: OTI4G7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4G7
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:200~2000, IHC 1:150, IF 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PTK2(NP_722560) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	119.1 kDa
Gene Name:	protein tyrosine kinase 2
Database Link:	<a href="#">NP_722560</a> <a href="#">Entrez Gene 14083 Mouse</a> <a href="#">Entrez Gene 25614 Rat</a> <a href="#">Entrez Gene 5747 Human</a> <a href="#">Q05397</a>



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**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 nature of only three of them have been determined. [provided by RefSeq, Dec 2010]

**Synonyms:**

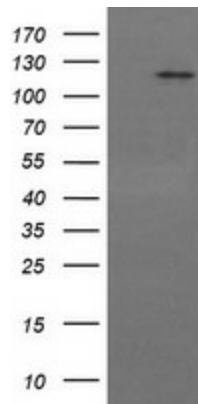
FADK; FADK 1; FAK; FAK1; FRNK; p125FAK; pp125FAK; PPP1R71

**Protein Families:**

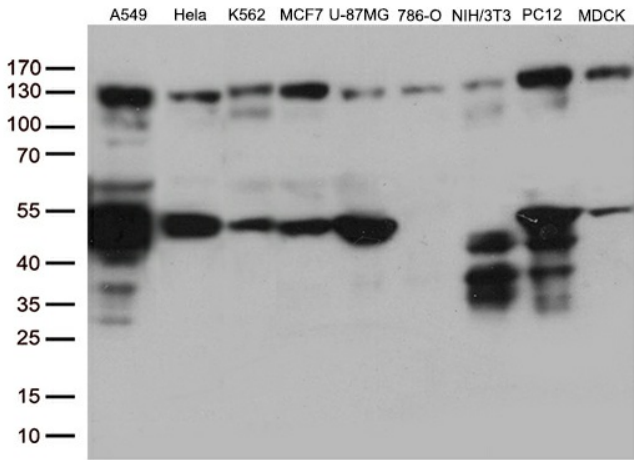
Druggable Genome, Protein Kinase

**Protein Pathways:**

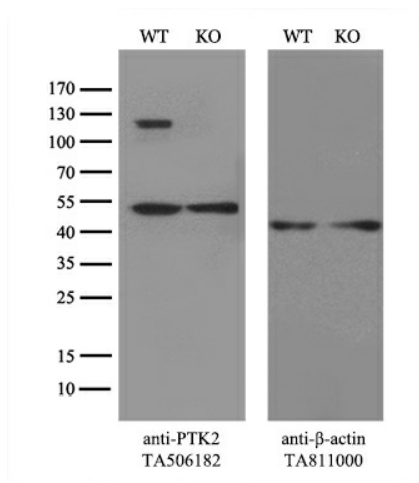
Axon guidance, Chemokine signaling pathway, ErbB signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer, VEGF signaling pathway

**Product images:**

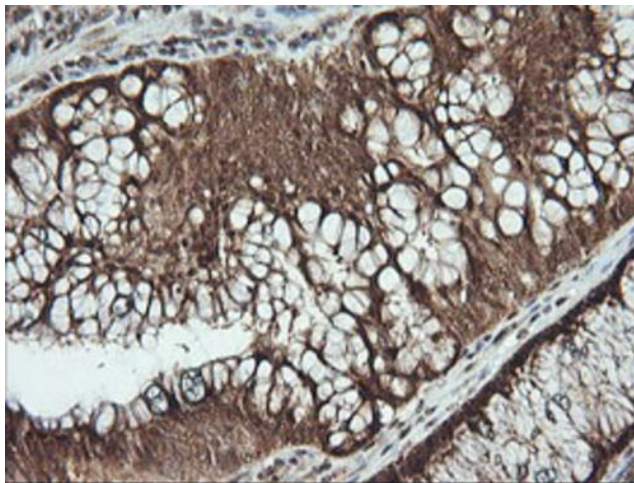
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PTK2 ([RC219839], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTK2. Positive lysates [LY403521] (100ug) and [LC403521]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



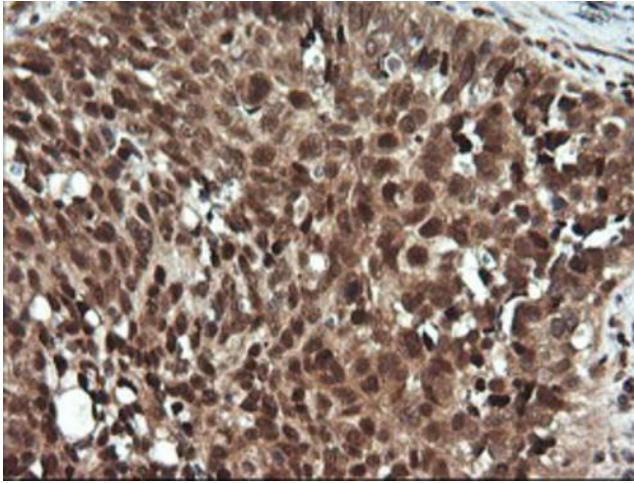
Western blot analysis of extracts (35ug) from 9 different cell by using anti-PTK2 monoclonal antibody (1:500).



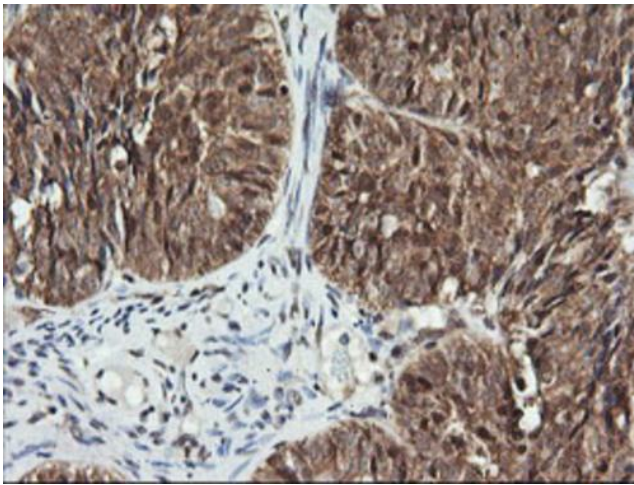
Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and PTK2-Knockout 293T cells (KO, Cat# [LC811213]) were separated by SDS-PAGE and immunoblotted with anti-PTK2 monoclonal antibody [TA506182], (1:500). Then the blotted membrane was stripped and reprobed with anti- $\beta$ -actin antibody ([TA811000]) as a loading control.



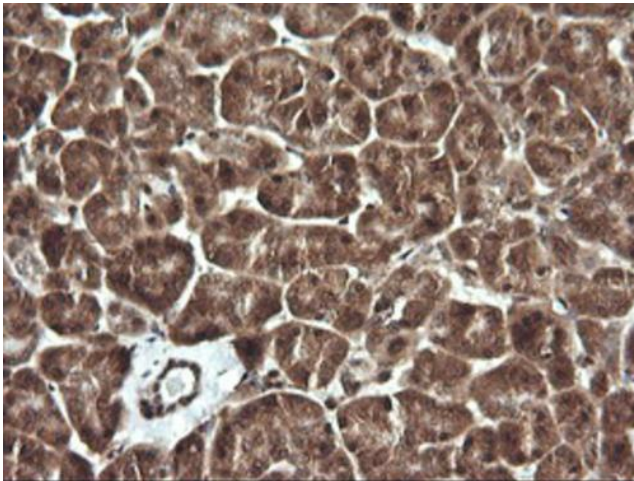
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-PTK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



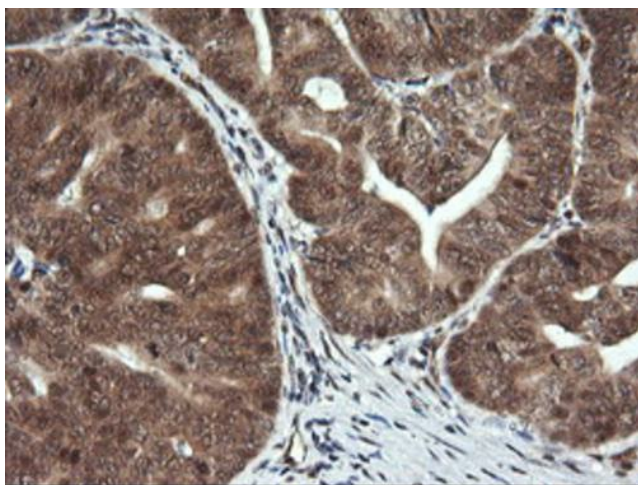
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-PTK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



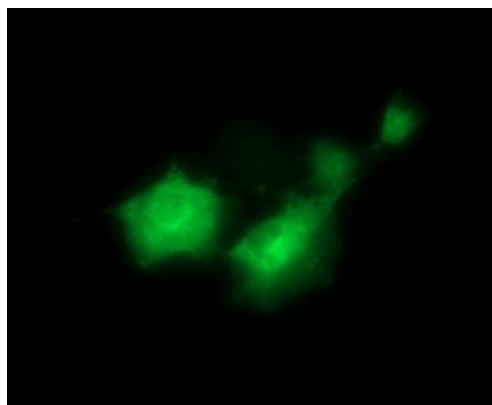
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-PTK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-PTK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-PTK2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-PTK2 mouse monoclonal antibody ([TA506182]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PTK2 ([RC219839]).