

Phospho-FAK (Tyr397) Monoclonal Antibody (141-9)

Product Details	
Size	10 blots
Species Reactivity	Chicken, Fruit fly, Human, Mouse, Rat, Xenopus
Published Species	Rat, Fish, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	141-9
Conjugate	Unconjugated
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human FAK that contains tyrosine 397. The sequence is conserved in mouse, rat, chicken and frog.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	Dulbecco's PBS, pH 7.3, with 50% glycerol, 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20°C
RRID	AB_2533702

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-dependent	39 Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	Assay-dependent	10 Publications
Immunoprecipitation (IP)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

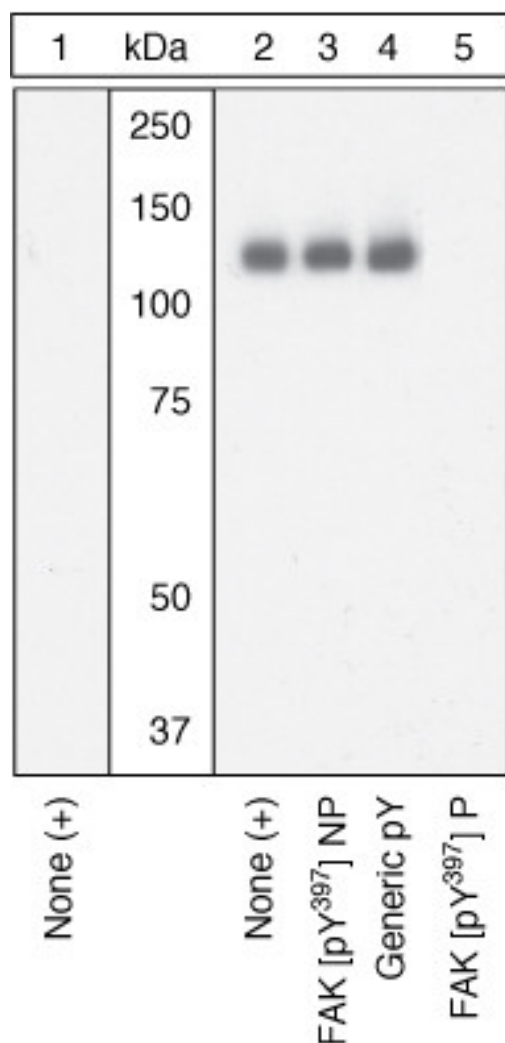
Product Specific Information

This antibody will cross-react with the corresponding autophosphorylation site on Proline-rich/Ca²⁺- activated tyrosine kinase (Pyk2), [pY402]. FAK [pY397] polyclonal antibody (Cat. No. 44-624G) does not cross-react with Pyk2.

The antibody has been used in western blotting. Previous lots of this antibody have been used in immunocytochemistry. For western blotting applications, we recommend using the antibody at a 1:1,000 starting dilution. For immunofluorescence staining applications, we recommend a 1:50 starting dilution. Positive control used: Primary chicken embryo fibroblasts expressing human FAK and plated on fibronectin.

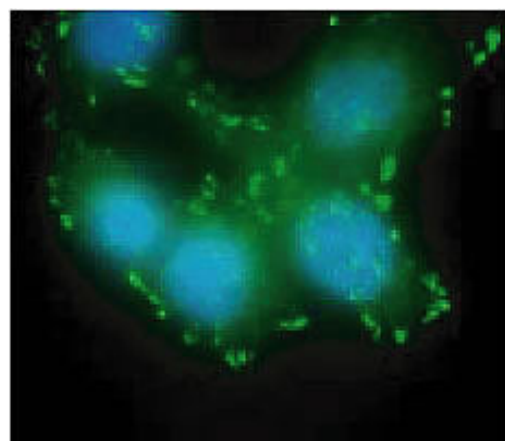
We recommend a brief centrifugation before opening to settle vial contents. Then, apportion into working aliquots and store at -20° C. For shipment or short-term storage (up to one week), 2-8° C is sufficient. Expires one year from date of receipt when stored as instructed.

Product Images For Phospho-FAK (Tyr397) Monoclonal Antibody (141-9)



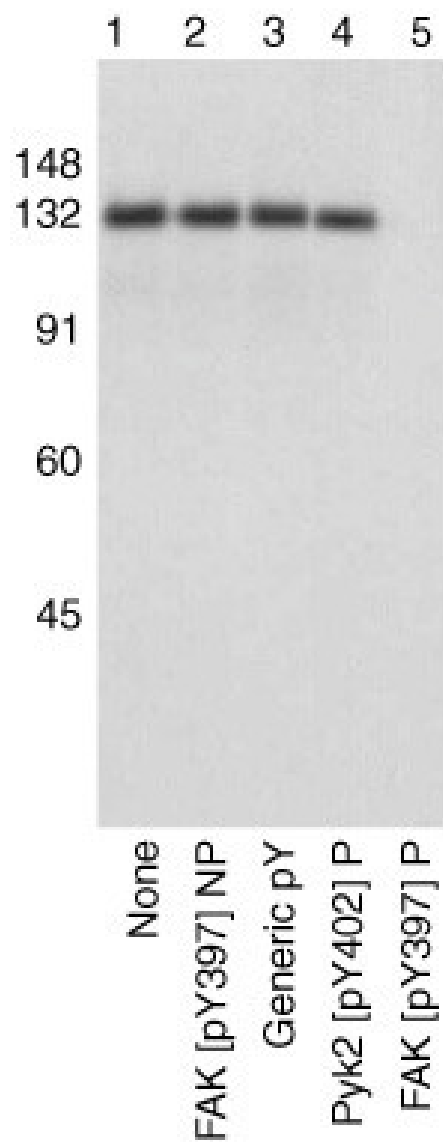
Phospho-FAK (Tyr397) Antibody (44-625G) in WB

Up-regulation and Antibody-Peptide Competition. Peptide Competition Experiment. Extracts of vanadate-treated (50 μ M, 16 hours) primary chicken embryo fibroblasts plated on fibronectin and expressing either FAK Y397F mutant protein (lane 1) or FAK wildtype protein (lanes 2-6) were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to PVDF. The membrane was blocked with a 5% BSA-TBST buffer for 1 hour at room temperature, then incubated with the FAK (pY397) monoclonal antibody for two hours at room temperature in a 3% BSA-TBST buffer, following prior incubation with: no peptide (lanes 1 and 2), the non-phosphopeptide corresponding to the phosphopeptide immunogen (lane 3), a generic phosphotyrosine-containing peptide (lane 4), or the phosphopeptide immunogen (5). After washing, the membrane was incubated with goat F (ab')₂ anti-rabbit IgG HRP-conjugate (Product # ALI4404) and signals were detected using the Pierce SuperSignal™ method. The data demonstrate the specificity of the antibody by mutant analysis and by peptide competition. Immunofluorescence Staining HeLa cells were fixed prior to immunostaining with the FAK (pY397) monoclonal antibody. Signals were detected with an anti-rabbit FITC conjugated secondary antibody. The data show that the antibody detected phosphorylated FAK localized at focal adhesions. Cells were counterstained with DAPI.



Phospho-FAK (Tyr397) Antibody (44-625G) in ICC/IF

HeLa cells were fixed prior to immunostaining with the Rabbit anti-FAK (pY397) monoclonal antibody. The signal was detected with an anti-rabbit FITC conjugated secondary antibody. The data shows that the antibody detected phosphorylated FAK localized at focal adhesions. Cells were counterstained with DAPI. (Product # 44-625G)



Phospho-FAK (Tyr397) Antibody (44-625G) in WB

Western Blot analysis using Rabbit anti-FAK (pY397) monoclonal antibody (Product # 44-625G).

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Western Blot (39)

Communications biology	Year 2022
SMAD2/3 mediate oncogenic effects of TGF- in the absence of SMAD4.	
"Published figure using Phospho-FAK (Tyr397) monoclonal antibody (Product # 44-625G) in Western Blot"	
Authors: Bertrand-Chapel A,Caligaris C,Fenouil T,Savary C,Aires S,Martel S,Huchedé P,Chassot C,Chauvet V,Cardot-Ruffino V,Morel AP,Subtil F,Mohkam K,Mabrut JY,Tonon L,Viari A,Cassier P,Hervieu V,Castets M,Mauviel A,Sentis S,Bartholin L	
Science advances	Year 2021
Intravital imaging technology guides FAK-mediated priming in pancreatic cancer precision medicine according to Merlin status.	
"Published figure using Phospho-FAK (Tyr397) monoclonal antibody (Product # 44-625G) in Western Blot"	
Authors: Murphy KJ,Reed DA,Vennin C,Conway JRW,Nobis M,Yin JX,Chambers CR,Pereira BA,Lee V,Filipe EC,Trpceski M,Ritchie S,Lucas MC,Warren SC,Skhinas JN,Magenau A,Metcalfe XL,Stoehr J,Major G,Parkin A,Bidanel R,Lyons RJ,Zaratzian A,Tayao M,Da Silva A,Abdulkhalek L,Gill AJ,Johns AL,Biankin AV,Samra J,Grimmond SM,Chou A,Goetz JG,Samuel MS,Lyons JG,Burgess A,Caldon CE,Horvath LG,Daly RJ,Gadegaard N,Wang Y,Sansom OJ,Morton JP,Cox TR,Pajic M,Herrmann D,Timpson P	

View more WB references on thermofisher.com

Immunohistochemistry (10)

Molecular biology of the cell	Year 2021
Integrin-linked kinase tunes cell-cell and cell-matrix adhesions to regulate the switch between apoptosis and EMT downstream of TGF1.	
"Published figure using Phospho-FAK (Tyr397) monoclonal antibody (Product # 44-625G) in Immunohistochemistry"	
Authors: Kilinc AN,Han S,Barrett LA,Anandasivam N,Nelson CM	
Nature medicine	Year 2016
Genotype tunes pancreatic ductal adenocarcinoma tissue tension to induce matricellular fibrosis and tumor progression.	
"Published figure using Phospho-FAK (Tyr397) monoclonal antibody (Product # 44-625G) in Immunohistochemistry"	
Authors: Laklai H,Miroshnikova YA,Pickup MW,Collisson EA,Kim GE,Barrett AS,Hill RC,Lakins JN,Schlaepfer DD,Mouw JK,LeBleu VS,Roy N,Novitskiy SV,Johansen JS,Poli V,Kalluri R,Iacobuzio-Donahue CA,Wood LD,Hebrok M,Hansen K,Moses HL,Weaver VM	
	Species Mouse

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

- IHC (F) (1)
- ICC/IF (10)
- IP (1)
- Misc (1)

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