

Phospho-FAK (Tyr397) Recombinant Rabbit Monoclonal Antibody (31H5L17)

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Dog, Rat, Fruit fly, Mouse, Human
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	31H5L17
Conjugate	Unconjugated
Immunogen	A peptide corresponding to amino acids 390-401 of Q05397.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2532307

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	28 Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:10-1:1,000	2 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunocytochemistry (ICC/IF)	1:500-1:2,000	12 Publications
Flow Cytometry (Flow)	-	1 Publication
ELISA (ELISA)	1:500-1:2,000	-
Immunoprecipitation (IP)	-	2 Publications
Functional Assay (FN)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

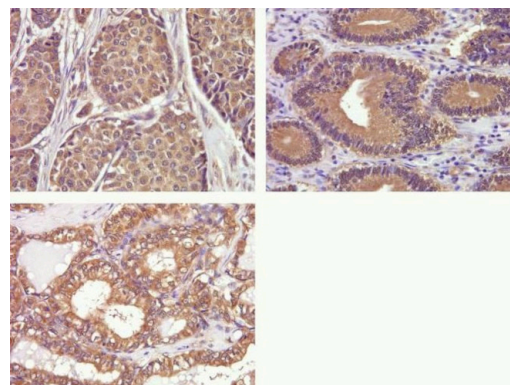
This antibody is predicted to react with mouse, rat, primate, bovine, equine, canine, chicken, opossum, zebra finch, zebrafish, Xenopus, and pufferfish based on sequence homology.

This antibody was tested in IHC on breast, gastric, and thyroid carcinoma tissue and on HeLa and A549 cells in IF applications. This antibody has been used as a detector in a sandwich ELISA format.

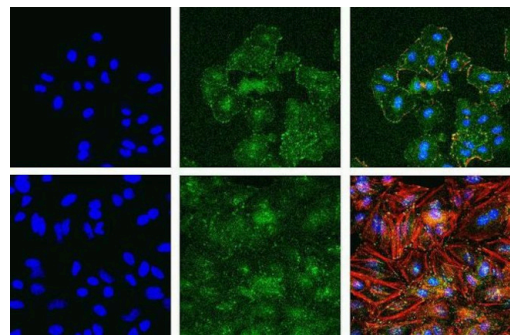
Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are

developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

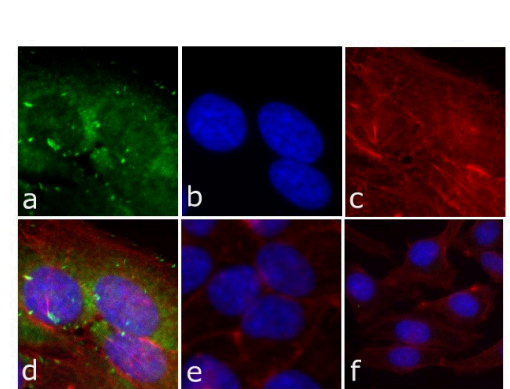
Product Images For Phospho-FAK (Tyr397) Recombinant Rabbit Monoclonal Antibody (31H5L17)



Phospho-FAK (Tyr397) Antibody (700255) in IHC (P)
Immunohistochemistry analysis of Phospho-FAK pTyr397 in formalin-fixed, paraffin-embedded human breast (top left), gastric (top right), and thyroid carcinoma (bottom) using a Phospho-FAK pTyr397 monoclonal antibody (Product # 700255) at a dilution of 1:50. Staining was visualized using DAB and images were taken at a magnification of 40x. Results show cytoplasmic staining in tumor cells.



Phospho-FAK (Tyr397) Antibody (700255) in ICC/IF
Immunofluorescent analysis of Phospho-FAK pTyr397 in A549 (top) and HeLa cells (bottom) using a Phospho-FAK pTyr397 recombinant rabbit monoclonal antibody (Product # 700255) at a dilution of 1:2000 (A549) and 1:1000 (HeLa) followed by detection using an Alexa Fluor 488-conjugated goat anti-rabbit secondary antibody at a dilution of 1:1000. Hoechst only (left), AF488 signal only (middle) and composite image (right) using an Alexa Fluor 568 Phalloidin.



Phospho-FAK (Tyr397) Antibody (700255) in ICC/IF
Immunofluorescent analysis of FAK (pY397) was done on 80% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes; permeabilized with 0.25% Triton X-100 for 10 minutes followed by blocking with 5% BSA for 1 hour at room temperature. The cells were incubated with FAK (pY397) Recombinant Rabbit Monoclonal Antibody (Product # 700255) at 1 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor® 488 Goat anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing cytoplasmic of FAK (pY397). Panel e shows no primary antibody. The images were captured at 20X magnification.

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Western Blot (28)

Frontiers in oncology	Year 2023
Functional roles of FAP- in metabolism, migration and invasion of human cancer cells.	
"Published figure using Phospho-FAK (Tyr397) recombinant monoclonal antibody (Product # 700255) in Western Blot"	
Authors: Mori N,Jin J,Krishnamachary B,Mironchik Y,Wildes F,Vesuna F,Barnett JD,Bhujwalla ZM	
American journal of cancer research	Year 2022
A novel DDR1 inhibitor enhances the anticancer activity of gemcitabine in pancreatic cancer.	Species Human
"700255 was used in Western Blotting to demonstrate that KI-301690 can inhibit aberrant ECM expression by DDR1 /PYK2/FAK signaling pathway blockade and attenuation of ECM-induced chemoresistance observed in desmoplastic pancreatic tumors, resulting in enhanced antitumor effect through effective induction of gemcitabine apoptosis."	
Authors: Ko S,Jung KH,Yoon YC,Han BS,Park MS,Lee YJ,Kim SE,Cho YJ,Lee P,Lim JH,Ryu JK,Kim K,Kim TY,Hong S, Lee SH,Hong SS	
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Immunohistochemistry (10)

Cancers	Year 2022
Focal Adhesion Kinase Provides a Collateral Vulnerability That Can Be Leveraged to Improve mTORC1 Inhibitor Efficacy.	Species Mouse
"700255 was used in Immunohistochemistry to reveal an innate dependency on FAK when mTORC1 signaling is lost in tumors that are resistant to mTORC1 inhibitors."	Dilution 1:1000
Authors: Cuellar-Vite L,Weber-Bonk KL,Abdul-Karim FW,Booth CN,Keri RA	
Molecular cancer therapeutics	Year 2021
A Novel CDK2/9 Inhibitor CYC065 Causes Anaphase Catastrophe and Represses Proliferation, Tumorigenesis, and Metastasis in Aneuploid Cancers.	Species Mouse
"700255 was used in Immunohistochemistry to guide future trials of this novel CDK2/9 inhibitor in the cancer clinic."	Dilution 1:2000
Authors: Kawakami M,Mustachio LM,Chen Y,Chen Z,Liu X,Wei CH,Roszik J,Kittai AS,Danilov AV,Zhang X,Fang B, Wang J,Heymach JV,Tyutyunyk-Massey L,Freemantle SJ,Kurie JM,Liu X,Dmitrovsky E	
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- IHC (P) (2)
- IHC (PFA) (1)
- ICC/IF (12)
- Flow (1)
- IP (2)
- FN (1)
- Misc (1)

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