

Vinculin Recombinant Rabbit Monoclonal Antibody (42H89L44)

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Fruit fly, Non-human primate, Deer, Hamster, Mouse, Human
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	42H89L44
Conjugate	Unconjugated
Immunogen	A recombinant protein corresponding to amino acids 408-591 of P18206.
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_2532280

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5-3 µg/mL	28 Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	0.5-5 µg/mL	19 Publications
Flow Cytometry (Flow)	2-4 µg/1x10 ⁶ cells	-
Immunoprecipitation (IP)	-	1 Publication
in situ PLA (PLA)	-	1 Publication

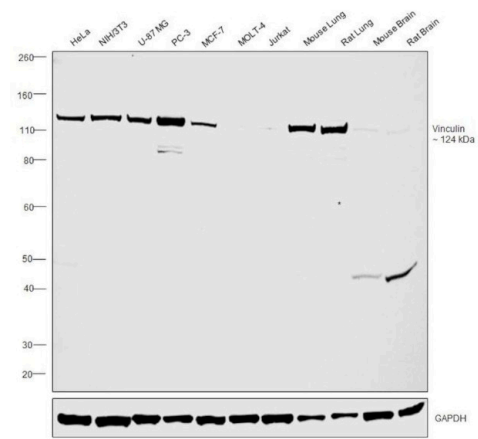
Product Specific Information

Intact IgG appears on a non-reducing gel as ~150 kDa band and upon reduction generating a ~25 kDa light chain band and a ~50 kDa heavy chain.

This antibody reacts with Human Vinculin. Based on sequence similarity, reactivity to chimpanzee, Rhesus monkey, swine, equine, mouse, rat, bovine, and chicken is expected. Immunogen sequence IRGALAEARKIAELCDDPKERDDILRSLGEI
SALTSKLADLRRQGKGDSPEARALAKQV ATALQNLQTKTNRAVANSRPAKAAVHLE
GKIEQAQRWIDNPTVDDRGVGQAAIRGL VAEGHRLANVMMGPYRQDLLAKCDRVD
QLTAQLADLAARGEESPQARALASQLQ DSLKDLKARMQEAM. Test material for western blotting/immunofluorescence: HeLa cells.

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 Vinculin Recombinant Rabbit Monoclonal Antibody (42H89L44)

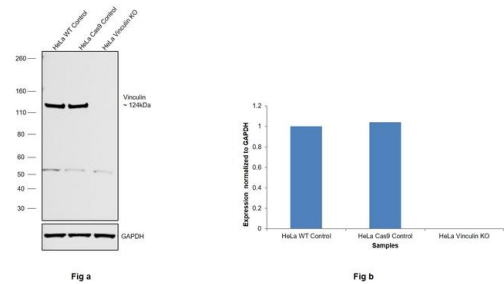


Vinculin Antibody (700062)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines and tissues tested owing to their inherent genetic constitution. Relative expression of Vinculin was observed to be high in HeLa, NIH/3T3, U-87 MG, PC-3, MCF-7 in comparison to low or negative in MOLT-4 and Jurkat. In tissues relative expression was observed to be high in Mouse Lung, Rat Lung in comparison to low or negative in Mouse Brain, Rat Brain using Anti-Vinculin Recombinant Rabbit Monoclonal Antibody (42H89L44) (Product # 700062) in Western Blot. {RE}

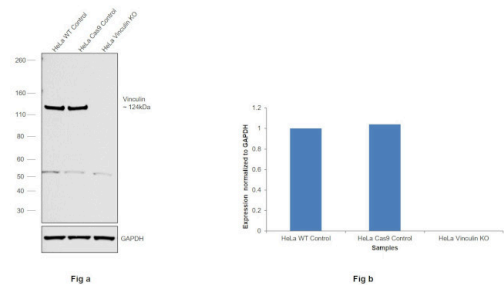
Vinculin Antibody (700062) in WB

Knockout of Vinculin was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR948199_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Western blot analysis of Vinculin was performed by loading 30 µg of HeLa Wild Type (Lane 1), HeLa Cas9 (Lane 2) and HeLa Vinculin KO (Lane 3) membrane enriched extracts. The samples were electrophoresed using NuPAGE™ Novex™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with Anti-Vinculin Recombinant Rabbit Monoclonal Antibody (42H89L44) (Product # 700062, 1:500 dilution) and Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:6,000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). Loss of signal upon CRISPR mediated knockout (KO) using the LentiArray™ CRISPR product line confirms that antibody is specific to Vinculin. An uncharacterized band observed at ~55 kDa in all the samples.



Vinculin Antibody (700062)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in Vinculin KO cell line compared to control cell line using Anti-Vinculin Recombinant Rabbit Monoclonal Antibody (42H89L44) (Product # 700062). {KO}



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Western Blot (28)

<p>Science advances</p> <p>Piezo1 activates noncanonical EGFR endocytosis and signaling.</p> <p>"Published figure using Vinculin recombinant monoclonal antibody (Product # 700062) in Western Blot"</p> <p>Authors: Pardo-Pastor C,Rosenblatt J</p>	<p>Year</p> <p>2023</p>
<p>Microbiology spectrum</p> <p>Interferon-independent processes constrain measles virus cell-to-cell spread in primary human airway epithelial cells.</p> <p>"Published figure using Vinculin recombinant monoclonal antibody (Product # 700062) in Western Blot"</p> <p>Authors: Durnell LA,Hippee CE,Cattaneo R,Bartlett JA,Singh BK,Sinn PL</p>	<p>Year</p> <p>2023</p>

[View more WB references on thermofisher.com](#)

Immunohistochemistry (1)

<p>Cancer research</p> <p>Force engages vinculin and promotes tumor progression by enhancing PI3K activation of phosphatidylinositol (3,4,5)-triphosphate.</p> <p>"700062 was used in immunocytochemistry to study the mechanism of the activation of focal adhesion protein vinculin by mechanical stress"</p> <p>Authors: Rubashkin MG,Cassereau L,Bainer R,DuFort CC,Yui Y,Ou G,Paszek MJ,Davidson MW,Chen YY,Weaver VM</p>	<p>Year</p> <p>2014</p> <p>Species</p> <p>Human</p>
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Immunocytochemistry (19)

<p>Biomedicines</p> <p>Increased Stiffness Downregulates Focal Adhesion Kinase Expression in Pancreatic Cancer Cells Cultured in 3D Self-Assembling Peptide Scaffolds.</p> <p>"Published figure using Vinculin recombinant monoclonal antibody (Product # 700062) in Immunocytochemistry"</p> <p>Authors: Betriu N,Andreeva A,Alonso A,Semino CE</p>	<p>Year</p> <p>2022</p> <p>Species</p> <p>Human</p> <p>Dilution</p> <p>1:250</p>
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More applications with references on thermofisher.com

- IP (1)
- PLA (1)

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