

Rabbit Profilin 2/PFN2 Polyclonal Antibody | anti-PFN2 antibody

Anti-Profilin 2/PFN2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125776	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

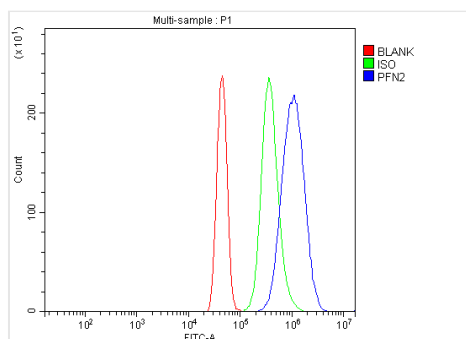
PRODUCT SYNONYMS

Profilin 2/PFN2; Polyclonal Antibody; Anti-Profilin 2/PFN2 Antibody; PFN2; Profilin-2; Profilin II; profilin 2; anti-PFN2 antibody

PRODUCT SPECIFICATIONS

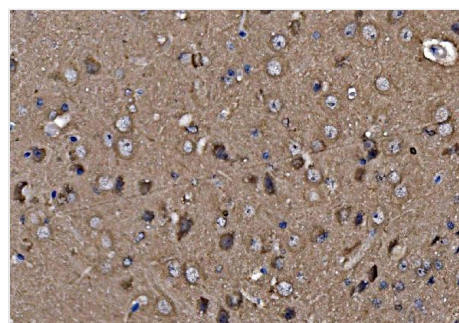
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Profilin 2/PFN2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-PFN2 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human Profilin 2/PFN2 recombinant protein (Position: E96-S138).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



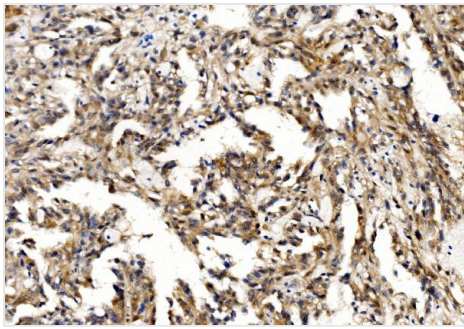
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of A431 cells using anti-Profilin 2/PFN2 antibody (AAA125776). Overlay histogram showing A431 cells stained with AAA125776 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Profilin 2/PFN2 Antibody (AAA125776, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



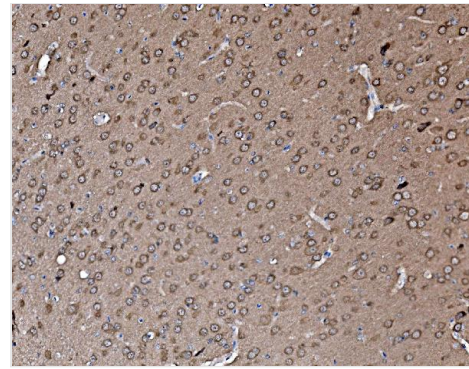
IHC (Immunohistochemistry)

Figure 4. IHC analysis of Profilin 2/PFN2 using anti-Profilin 2/PFN2 antibody (AAA125776). Profilin 2/PFN2 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-Profilin 2/PFN2 Antibody (AAA125776) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



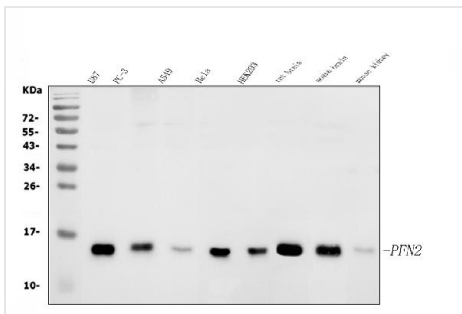
IHC (Immunohistochemistry)

Figure 3. IHC analysis of Profilin 2/PFN2 using anti-Profilin 2/PFN2 antibody (AAA125776). Profilin 2/PFN2 was detected in paraffin-embedded section of human renal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-Profilin 2/PFN2 Antibody (AAA125776) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Profilin 2/PFN2 using anti-Profilin 2/PFN2 antibody (AAA125776). Profilin 2/PFN2 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-Profilin 2/PFN2 Antibody (AAA125776) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Profilin 2/PFN2 using anti-Profilin 2/PFN2 antibody (AAA125776). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions. Lane 1: human U87 whole cell lysates Lane 2: human PC-3 whole cell lysates Lane 3: human A549 whole cell lysates Lane 4: human HeLa whole cell lysates Lane 5: human HEK293 whole cell lysates Lane 6: rat brain tissue lysates Lane 7: mouse brain tissue lysates Lane 8: mouse kidney tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-Profilin 2/PFN2 antigen affinity purified polyclonal antibody (Catalog # AAA125776) at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Profilin 2/PFN2 at approximately 15KD. The expected band size for Profilin 2/PFN2 is at 15KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PFN2 antibody

Profilin-2, also called PFN2, is a protein that in humans is encoded by the PFN2 gene. The protein encoded by this gene is a ubiquitous actin monomer-binding protein belonging to the profilin family. This gene is mapped to 3q25. 1. It is thought to regulate actin polymerization in response to extracellular signals. There are two alternatively spliced transcript variants encoding different isoforms described for this gene. It binds to actin and affects the structure of the cytoskeleton. At high concentrations, profilin prevents the polymerization of actin, whereas it enhances it at low concentrations. By binding to PIP2, it inhibits the formation of IP3 and DG.

References

1. Gieselmann, R., Kwiatkowski, D. J., Janmey, P. A., Witke, W. Distinct biochemical characteristics of the two human profilin isoforms. *Europ. J. Biochem.* 229: 621-628, 1995.
2. Joensuu, T., Blanco, G., Pakarinen, L., Sistonen, P., Kaariainen, H., Brown, S., de la Chapelle, A., Sankila, E. -M. Refined mapping of the Usher syndrome type III locus on chromosome 3, exclusion of candidate genes, and identification of the putative mouse homologous region. *Genomics* 38: 255-263, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	20178322
NCBI GeneID	5217
UniProt Accession #	P35080; Q4VBQ4; Q8WVF9; Q9HBK2; B2R4C8; D3DNI4
Molecular Weight	140
NCBI Official Full Name	Profilin-2
NCBI Official Synonym Full Names	profilin 2
NCBI Official Symbol	PFN2
NCBI Official Synonym Symbols	PFL; D3S1319E
NCBI Protein Information	profilin-2; profilin II
UniProt Protein Name	Profilin-2
UniProt Gene Name	PFN2
UniProt Entry Name	PROF2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/profilin-2-pfn2-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125776>