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Profilin-1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22110a

Product Information

Application	WB, FC, E
Primary Accession	P07737
Other Accession	P02584, P62962, P62963
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55919
Calculated MW	15054

Additional Information

Gene ID	5216
Other Names	Profilin-1, Epididymis tissue protein Li 184a, Profilin I, PFN1
Target/Specificity	This Profilin-1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 108-140 amino acids from the human region of human Profilin-1.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Profilin-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PFN1
Function	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. Inhibits androgen receptor (AR) and HTT aggregation and

binding of G-actin is essential for its inhibition of AR.

Cellular Location Cytoplasm, cytoskeleton.

Tissue Location Expressed in epididymis (at protein level).

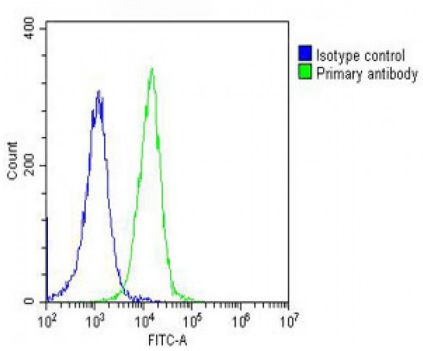
Background

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. Inhibits androgen receptor (AR) and HTT aggregation and binding of G-actin is essential for its inhibition of AR.

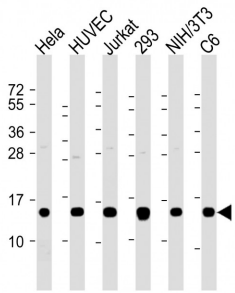
References

Kwiatkowski D.J.,et al.J. Biol. Chem. 263:5910-5915(1988).
Li J.,et al.Mol. Cell. Proteomics 9:2517-2528(2010).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.

Images



Overlay histogram showing Hela cells stained with AP22110a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22110a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-Profilin-1 Antibody at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HUVEC whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: 293 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: C6 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 15 kDa Blocking/Dilution buffer: 5% NFDM/TBST.