

Rabbit Profilin Polyclonal Antibody | anti-PFN1 antibody

Profilin (Ser-138), phospho-specific Antibody

CATALOG # AAA71697	HOST Rabbit	REACTIVITY Human, Rat, Mouse	APPLICATIONS ELISA, Western Blot
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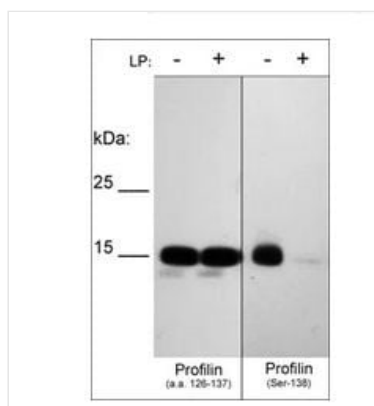
PRODUCT SYNONYMS

Profilin; Polyclonal Antibody; Profilin (Ser-138); phospho-specific Antibody; phospho-specific; Profilin Ser138; anti-PFN1 antibody

PRODUCT SPECIFICATIONS

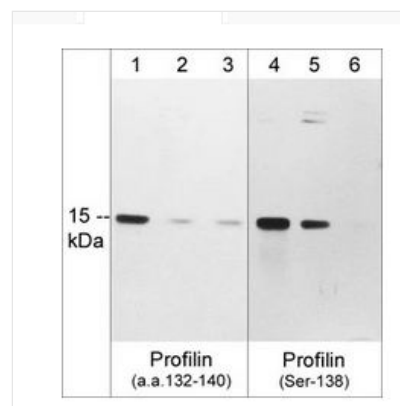
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to unphosphorylated Profilin (Ser-138) then affinity purified using Profilin (Ser-138) peptide (without carrier). The antibody detects a 15kDa band corresponding to the apparent molecular mass of Profilin-1 in human Jurkat and A431 cells, as well as rat PC12 cells. This reactivity is decreased by lambda phosphatase treatment, and is blocked by phospho-profilin (Ser-138) blocking peptide.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-PFN1 antibody	ELISA, WB (Western Blot)
Immunogen	Phospho-Profilin (Ser-138) synthetic peptide (coupled to carrier protein) that includes amino acids surrounding Ser-138 in human Profilin-1. This sequence is well conserved in rat and mouse Profilin-1. The serine site has some homology to the conserved site (Ser-138) in Profilin-2a and Profilin-2b, but the site is not conserved in Profilin-3 and Profilin-4.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



WB (Western Blot)

Western blot of human recombinant Profilin-1 phosphorylated in vitro with PKCalpha kinase then untreated (-) or treated with lambda phosphatase (+). The blots were probed with anti-Profilin (a.a. 126-137) (left panel) or anti-Profilin (Ser-138) phospho-specific (right panel) antibodies at 1:1000.



WB (Western Blot)

Western blot of Jurkat stimulated with calyculin A (100nM) for 30 min (lanes 1-6). The blots were probed with anti-Profilin (a.a. 132-140) (lanes 1-3) or anti-Profilin (Ser-138) phospho-specific (lanes 4-6). Both antibodies were used in the absence (lanes 1 & 4) or presence of unphosphorylated Profilin (Ser-138; PX4825) (lanes 2 & 5) or phospho-Profilin (Ser-138; PX4795) (lanes 3 & 6) blocking peptides.

ADDITIONAL INFORMATION

Related Product Information for anti-PFN1 antibody	Profilins are small actin-binding proteins that have functions in cell motility, cytokinesis, gene transcription, endocytosis and neuronal plasticity. Four profilin isoforms have been identified in mammals. Profilin-1 (PFN1) and profilin-2a (PFN2a) isoforms are highly conserved in structure, but PFN1 is ubiquitously expressed while PFN2a is preferentially enriched in brain. In addition, there are two testis-specific profilins, PFN3 and PFN4, that significantly differ in primary sequence and function compared to PFN1 and PFN2a. Profilin is phosphorylated at both tyrosine and serine residues in vivo. Tyr-129 is phosphorylated in response to VEGF-A stimulation, and this promotes profilin actin binding and polymerization. Tyr-129 phosphorylation may be important for angiogenesis induced by injuries. Ser-138 is phosphorylated by ROCK and dephosphorylated by PP1. This serine phosphorylation inhibits G-actin binding, as well as decreases profilin's aggregation suppressor activity by inhibiting binding to huntingtin. Thus, Tyr-129 phosphorylation may activate while Ser-138 phosphorylation may inhibit profilin activity.
References	Shao, J. & Diamond, M.I. (2012) PLoS ONE 7(3): e32802. Fan, Y. et al. (2012) Nat Cell Biol. 14(10):1046. Shao, J. et al. (2008) Mol Cell Biol. 28(17):5196.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4826898
NCBI GeneID	5216
NCBI Accession #	NP_005013.1
NCBI GenBank Nucleotide #	NM_005022.3
UniProt Accession #	P07737; Q53Y44
Molecular Weight	140
NCBI Official Full Name	profilin-1
NCBI Official Synonym Full Names	profilin 1
NCBI Official Symbol	PFN1
NCBI Official Synonym Symbols	ALS18
NCBI Protein Information	profilin-1; profilin I; epididymis tissue protein Li 184a
UniProt Protein Name	Profilin-1
UniProt Gene Name	PFN1
UniProt Entry Name	PROF1_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-antibody-western-blot-elisa/71697>