10320 Camino Santa Fe, Suite G
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Anti-Profilin (C-terminal region) Antibody
Catalog # AN1920

Specification

Anti-Profilin (C-terminal region) Antibody - Product Information

Application	**WB**
Primary Accession	P07737
Reactivity	**Bovine**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**15054**

Anti-Profilin (C-terminal region) Antibody - Additional Information

Gene ID	**5216**

Other Names
Epididymis Li184a Profilin PFN1 PFN2

Dilution
WB~~1:1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Profilin (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Profilin (C-terminal region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Profilin (C-terminal region) Antibody - Images

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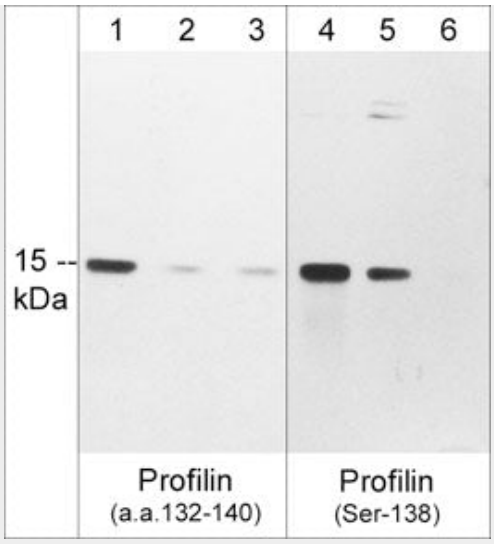
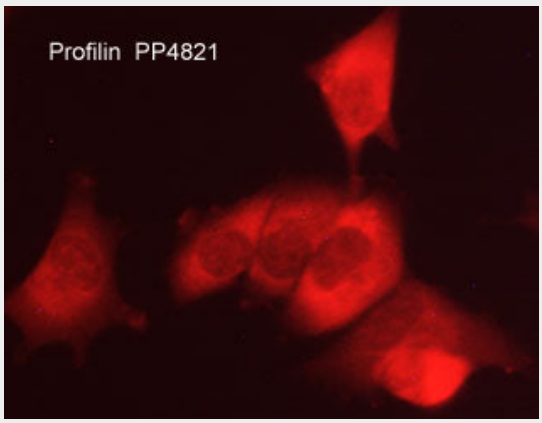


Western blot of Jurkat stimulated with calyculin A (100 nM) for 30 min (lanes 1-6). The blots were probed with anti-Profilin (a.a. 132-140) (lanes 1-3) or anti-Profilin (Ser-138) phospho-specific (lanes 4-6). Both antibodies were used in the absence (lanes 1 & 4) or presence of unphosphorylated Profilin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



Immunocytochemical labeling of Profilin in aldehyde-fixed and NP-40 permeabilized human NCI-H1915 lung carcinoma cells. The cells were labeled with rabbit polyclonal anti-Profilin (PP4821) antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

Anti-Profilin (C-terminal region) Antibody - Background

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.