10320 Camino Santa Fe, Suite G
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Anti-Profilin (Tyr-129), Phosphospecific Antibody
Catalog # AN1923

Specification

Anti-Profilin (Tyr-129), Phosphospecific Antibody - Product Information

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

Anti-Profilin (Tyr-129), Phosphospecific Antibody - Additional Information

Gene ID	**5216**

Other Names
Epididymis Li184a Profilin PFN1 PFN2

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 (Tyr-129), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Profilin (Tyr-129), Phosphospecific 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 (Tyr-129), Phosphospecific Antibody - Images

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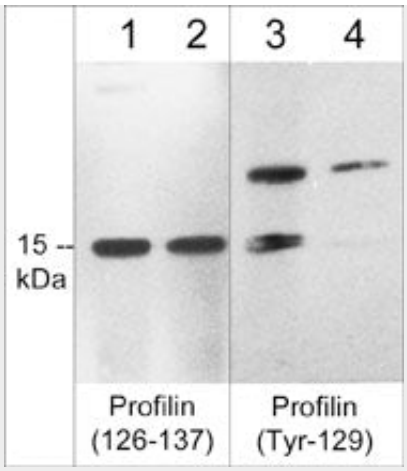

Western blot of HUVEC stimulated with Pervanadate (1 mM) for 30 min (lanes 1-4). The blots were treated with alkaline phosphatase to remove phosphorylation (lanes 2 & 4), then probed with anti-Profilin (a.a. 126-137) (lanes 1 & 2) or anti-Profilin (Tyr-129) phospho-specific (lanes 3 & 4). The antibodies detect profilin at 15 kDa. In lanes 3 & 4, the antibody also detects an unknown 20 kDa protein.

Anti-Profilin (Tyr-129), Phosphospecific 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.