

**Anti-Profilin (Tyr-129), Phosphospecific Antibody**  
Catalog # AN1923**Specification****Anti-Profilin (Tyr-129), Phosphospecific Antibody - Product Information**

Primary Accession	<a href="#">P07737</a>
Reactivity	<b>Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Rabbit Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>15054</b>

**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.

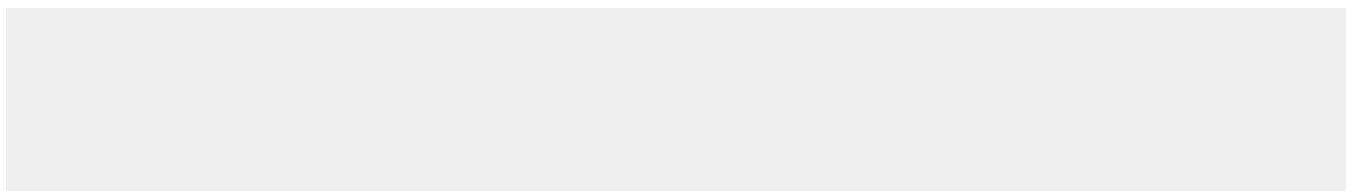
**Shipping**

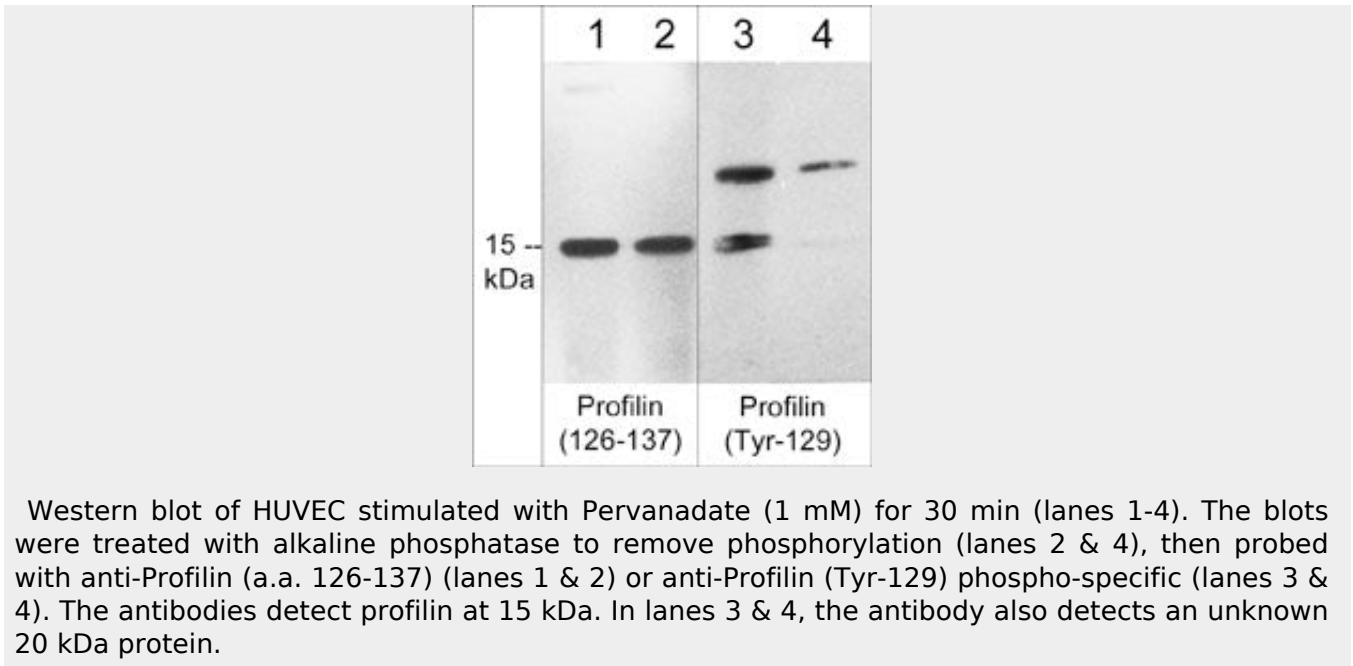
Blue Ice

**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 Cytometry](#)
- [Cell Culture](#)

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



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.