

### Lysate Preparation

Profilins are highly conserved, small actin-binding proteins that include Profilin-1 to -4 (PFN1-4). PFN1 is ubiquitously expressed while PFN2 is preferentially enriched in brain. The two testis-specific profilins, PFN3 and PFN4, significantly differ in primary sequence and function compared to PFN1 and PFN2. 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. 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.

Human recombinant Profilin full length protein (15 kDa) was the control treatment for Profilin phosphorylated by PKC $\alpha$  (PL7221). This Profilin-1 protein is detected by rabbit polyclonal anti-Profilin (a.a. 126-137) (Cat.#PP4801).

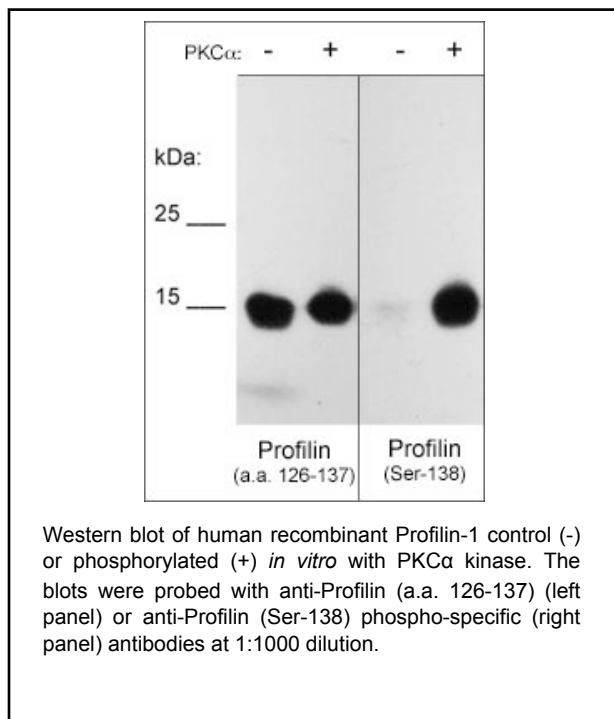
### Buffer and Storage

Profilin-1 recombinant protein lysate is supplied at a concentration of 5 ng/µl in electrophoresis sample buffer (62.5 mM Tris pH 6.8, 2% SDS, 5% glycerol, 0.003% bromophenol blue, 0.9%  $\beta$ -mercaptoethanol). Store at -20°C. Do not boil or dilute. Stable for 1 year.

### Applications

WB 10 µl/lane

End user should determine optimal quantity for their particular applications and experiments.



### Related Products

- PL7221 Profilin-1 + PKC $\alpha$  Lysate
- PP4801 Profilin (a.a. 126-137) Rabbit Polyclonal
- PP4751 Profilin (Tyr-129), phospho-specific Rabbit Polyclonal
- PP4821 Profilin (a.a. 132-140) Rabbit Polyclonal
- PK6930 Profilin Phospho-Regulation Antibody Sampler Kit

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