

## 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 phosphorylated by PKC $\alpha$  in an *in vitro* kinase assay. The phosphorylated Profilin-1 protein is detected by rabbit polyclonal anti-Profilin (Ser-138) phospho-specific (Cat.#PP4791).

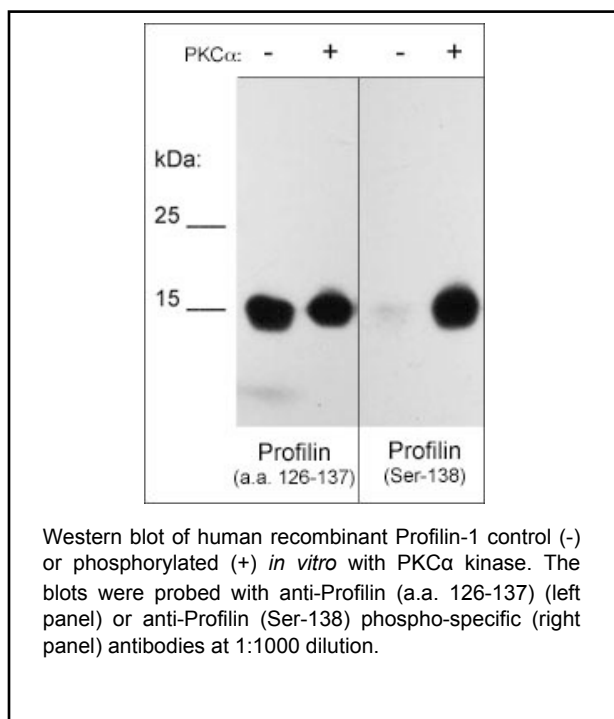
## Buffer and Storage

Profilin-1 recombinant protein lysate is supplied at a concentration of 5 ng/ $\mu$ l 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  $-20^{\circ}\text{C}$ . Do not boil or dilute. Stable for 1 year.

## Applications

WB 10  $\mu$ l/lane

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



## Related Products

- PP4791 Profilin (Ser-138), phospho-specific Rabbit Polyclonal
- PP4751 Profilin (Tyr-129), phospho-specific Rabbit Polyclonal
- PP4801 Profilin (a.a. 126-137) Rabbit Polyclonal
- PK6930 Profilin Phospho-Regulation Antibody Sampler Kit
- PL7211 Profilin-1 Recombinant Protein Lysate

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