

#4761 Store at -20°C

Phospho-Filamin A (Ser2152) Antibody

✓ 100 µl
(10 western blots)



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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

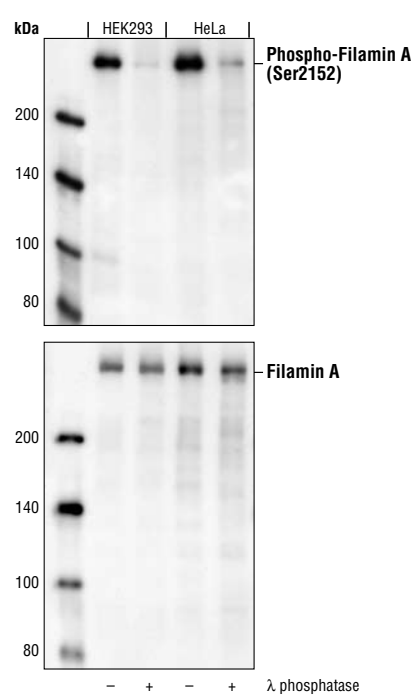
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	280 kDa	Rabbit**

Background: Filamins are a family of dimeric actin binding proteins that function as structural components of cell adhesion sites. They also serve as a scaffold for subcellular targeting of signaling molecules (1). The actin binding domain (α -actinin domain) is located at the very amino-terminus, followed by as many as 24 tandem repeats of about 96 residues, and the dimerization domain is located at the carboxy terminal end of the protein. In addition to actin filaments, filamins associate with other structural and signaling molecules such as β -integrins, Rho/Rac/Cdc42, PKC, and insulin receptor, primarily through their carboxy terminal half (1-3). Filamin A, the most abundant, and filamin B, less abundant, are widely expressed isoforms, while filamin C is predominantly expressed in muscle (1). Ser2152 of filamin A is phosphorylated by PAK1, and this phosphorylation is required for PAK1-mediated actin cytoskeleton reorganization (4).

Specificity/Sensitivity: Phospho-Filamin A (Ser2152) Antibody detects endogenous levels of filamin A only when phosphorylated at Ser2152. This antibody also reacts with filamin C when it is phosphorylated at Ser2146.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with synthetic phosphopeptides corresponding to residues surrounding Ser2152 of human filamin A and Ser2146 of human filamin C. Antibodies are purified by protein A and peptide affinity chromatography.

- Background References:**
- (1) Stossel, T.P. et al. (2001) *Nat. Rev. Mol. Cell Biol.* 2, 138–145.
 - (2) Tigges, U. et al. (2003) *J. Biol. Chem.* 278, 23561–23569.
 - (3) He, H. et al. (2003) *J. Biol. Chem.* 278, 27096–27104.
 - (4) Vadlamudi, R.K. et al. (2002) *Nat. Cell Biol.* 4, 681–690.



Western blot analysis of extracts from HEK293 and HeLa cells, untreated or λ phosphatase-treated using Phospho-Filamin A (Ser2152) Antibody (upper) and Filamin A Antibody #4762 (lower).

Entrez-Gene ID #2316
Swiss-Prot Acc. #P21333

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.