Revision 4

#4761 Store at -20C

Phospho-Filamin A (Ser2152) Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	280	Rabbit	#P21333	2316

Product Usage Information

Application	Dilution
Western Blotting	1:1000

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.

Specificity / Sensitivity

Phospho-Filamin A (Ser2152) Antibody detects endogenous levels of filamin A only when phosphorylated at serine 2152. This antibody also reacts with filamin C when it is phosphorylated at serine 2146.

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

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) located at the amino terminus is followed by as many as 24 tandem repeats of about 96 residues and the dimerization domain is located at the carboxy terminus. In addition to actin filaments, filamins associate with other structural and signaling molecules such as β-integrins, Rho/Rac/Cdc42, PKC and the insulin receptor, primarily through the carboxy-terminal dimerization domain (1-3). Filamin A, the most abundant, and filamin B are widely expressed isoforms, while filamin C is predominantly expressed in muscle (1). Filamin A is phosphorylated by PAK1 at Ser2152, which is required for PAK1-mediated actin cytoskeleton reorganization (4).

Background References

1. Stossel, T.P. et al. (2001) *Nat Rev Mol Cell Biol* 2, 138-45.
2. Tigges, U. et al. (2003) *J Biol Chem* 278, 23561-9.
3. He, H.J. et al. (2003) *J Biol Chem* 278, 27096-104.
4. Vadlamudi, R.K. et al. (2002) *Nat Cell Biol* 4, 681-90.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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 **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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Limited Uses