

phospho-Fascin (Ser-39) Peptide

Cat. # FX2665

Size 50 µg

Background:

Fascin is an actin filament bundling protein localized to lamellipodia and filopodia where it has important roles in cell motility. Regulation of fascin occurs through PKC-mediated phosphorylation of Ser-39 in the F-actin binding site. Cell permeant peptides that block PKC phosphorylation of Ser-39 increase cell migration, while peptides that block fascin binding to F-actin alter lamellipodial morphology and cause aberrant cell motility. Studies using RNA interference of fascin show that fibroblasts have reduced number and abnormal morphology of filopodia, while Ser-39 phosphorylation status may determine filopodial frequency. In *Drosophila* neurons, fascin deficiency causes alterations in actin filaments and leads to abnormal morphology of developing neurons. Thus, fascin is a critical element of actin-based motility in various cell types.

References

Adams, J.C. (2004) *Curr Opin Cell Biol.* 16(5):590.
Vignjevic, D. et al. (2006) *J Cell Biol.* 174(6):863.
Kraft, R. et al. (2006) *J Neurosci* 26:8734.
Aratyn, Y.S. et al. (2007) *Mol Biol Cell.* 18(10):3928.

Peptide Sequence:

Fascin (Ser-39) synthetic peptide corresponds to amino acids surrounding serine 39 in human fascin. This sequence has high homology to the conserved site in rat and mouse fascin, as well as to the conserved region in fascin-2, but has low homology to the conserved region in fascin-3.

Buffer and Storage:

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.
Store at -20°C. Stable for 1 year.

Applications:

Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

Specificity:

This peptide is specifically recognized by Fascin (Ser-39) phospho-specific antibody (FP2661) in ELISA, and has been shown to block the reactivity of FP2661 in Western blot and is recommended for blocking in immunocytochemistry.

Related Products:

FP2661 Fascin (Ser-39), phospho-specific Rabbit Polyclonal
FM2651 Fascin (clone 55K2) Mouse Monoclonal
AM2021 Actin (C-terminal region) Mouse Monoclonal
AP1651 Actin (N-terminal Region) Rabbit Polyclonal
AP1671 Actin (Tyr-53), phospho-specific Rabbit Polyclonal

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