

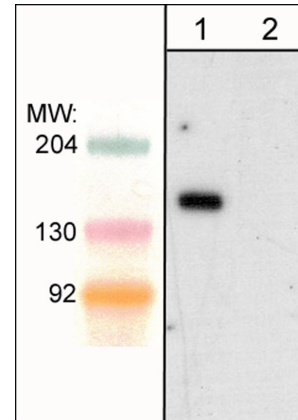
# Slingshot-1L (C-terminal Region) Peptide

Cat. # SX1715

Size 50 µg

## **Background:**

Members of the ADF/cofilin (AC) family are actin-severing proteins that regulate actin remodeling during cell motility. Regulation of cofilin activity can occur through serine phosphorylation and dephosphorylation. Activation of cofilin kinases, LIMK1 or LIMK2, leads to phosphorylation of cofilin at serine 3. This phosphorylation disrupts cofilin binding to actin *in vitro* and *in vivo*. Multiple phosphatases, Slingshot, PP1, PP2A, PP2B, and chronophin can dephosphorylate Ser-3 and activate actin binding. In mammals, the Slingshot family includes SSH1L, SSH2L, and SSH3L. SSH1L and SSH2L mRNAs are widely expressed, while SSH3L has high expression in epithelial tissues. SSH1L can associate with F-actin and may be the major phosphatase regulating cofilin activity. Disruption of SSH1L expression using RNA interference impairs directional cell migration. Thus, Slingshot phosphatases may be critical for regulating cytoskeletal protein activity and cell motility.



Western blot of rat PC12 cells. Blot was probed with anti-SSH1L (SP1711) in the absence (lane 1) or presence (lane 2) of SSH1L blocking peptide (SX1715).

## **References**

- Niwa, R. et al. (2002) Cell 108:233.  
Endo, M. et al. (2003) J Neurosci. 23(7):2527.  
Soosairajah, J. et al. (2005) EMBO J. 24(3):473.

## **Peptide Sequence:**

A synthetic peptide corresponding to amino acid residues in the C-terminal region of human SSH1L. This sequence has 100% homology with similar regions of mouse and bovine SSH1L, and has low homology to SSH2L and SSH3L.

## **Applications:**

Blocking 1:1,000

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.

## **Related Products:**

- SP1711 Slingshot-1L (C-terminal region) Rabbit Polyclonal  
CP1131 Cofilin 1 (N-terminus) Rabbit Polyclonal  
CP1151 Cofilin 1 (Ser-3), phospho-specific Rabbit Polyclonal

## **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.

## **Specificity:**

The peptide is specifically recognized by anti-SSH1L (C-terminal region) antibody (SP1711) in ELISA, and has been shown to block the reactivity of SP1711 during Western blot. In addition, the peptide is recommended for use in blocking SP1711 reactivity in immunocytochemistry.

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