

# Slingshot-1L (C-terminal Region)

Cat. # SP1711

Host Rabbit Polyclonal

Size 100 µl

## 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.

## 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.  
 Kim, J.S. et al. (2009) Mol Biol Cell. 20(11):2650. (WB: human HeLa, siRNA)  
 Eiseler, T. et al. (2009) Nat Cell Biol. 11(5):545. (WB, IP, ICC: human HeLa cells)

## Immunogen:

A synthetic peptide (coupled to KLH) 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:

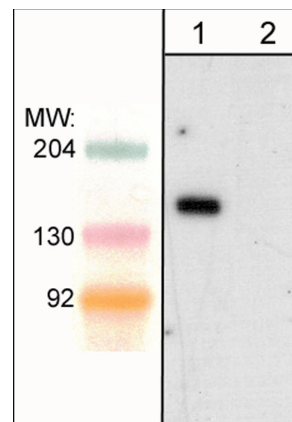
WB 1:1000  
 ELISA 1:2000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1hour at room temperature.

## Related Products:

- CP1131 Cofilin 1 (N-terminus) Rabbit Polyclonal  
 CP1151 Cofilin 1 (Ser-3), phospho-specific Rabbit Polyclonal  
 SX1715 Slingshot-1L (C-terminal region) Peptide  
 LP1831 LIMK1 (C-terminus) Rabbit Polyclonal  
 LP1891 LIMK1 (Thr-508), phospho-specific [Conserved site] Rabbit Polyclonal  
 LP2431 LIMK1 (Ser-323), phospho-specific [Conserved site] Rabbit Polyclonal

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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).

## Buffer and Storage:

Rabbit polyclonal, affinity-purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

## Specificity:

This antibody was affinity purified using SSH1L peptide (without carrier). The antibody detects a 150 kDa\* protein corresponding to the molecular mass of SSH1L on SDS-PAGE immunoblots of PC12 cells.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

web: [www.ecmbiosciences.com](http://www.ecmbiosciences.com)

telephone: 859-879-2075

email: [info@ecmbiosciences.com](mailto:info@ecmbiosciences.com)

toll-free: 1-800-859-8202