

Product datasheet for **TA389209**

Phospho-SSH1 (pSer978) Rabbit Antibody

Product data:

| | |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Type: | Primary Antibodies |
| Applications: | ICC, WB |
| Recommended Dilution: | WB: 1:1000 ICC: 1:100 |
| Reactivity: | Human, Rat, Mouse, Chicken |
| Host: | Rabbit |
| Isotype: | IgG |
| Immunogen: | Slingshot-1L (Ser-978) antibody was generated from a phospho-peptide that included amino acids surrounding serine 978 in human SSH1L. This sequence has high homology to the conserved site in rat, mouse, chicken, and zebrafish SSH1L. The sequence also has high homology to the conserved site in SSH2L (Ser-1259). |
| Specificity: | The antibody detects a 150 kDa* full length recombinant human SSH1L phosphoprotein and this reactivity is eliminated with lambda phosphatase treatment. The antibody also detects SSH1L on immunoblots of rat PC12 and mouse C2C12 cells that were stimulated with calyculin A. |
| Formulation: | PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol |
| Concentration: | lot specific |
| Purification: | Antigen Affinity Purified |
| Conjugation: | Unconjugated |
| Storage: | Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. |
| Stability: | After date of receipt, stable for at least 1 year at -20°C. |
| Predicted Protein Size: | 150 |
| Database Link: | Q8WYL5 |



[View online »](#)

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. Phosphorylation of SSH1L at Ser-937 and Ser-978 by PKD leads to association with 14-3-3, sequestration of the phosphatase to the cytoplasm, and reduces cell migration. Thus, Slingshot phosphatases may be critical for regulating cytoskeletal protein activity and cell motility.

Note:

Antigen affinity purified rabbit serum.