

#41255 Store at -20C

SLK Antibody

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

Applications: WB, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 220	Source: Rabbit	UniProt ID: #Q9H2G2	Entrez-Gene Id: 9748
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Product Usage
Information

Application

Western Blotting

Dilution

1:1000

Immunoprecipitation

1:50

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

SLK antibody recognizes endogenous levels of total SLK protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu431 of human SLK protein.

Background

SLK (Ste20-like Kinase) is a member of the germinal center kinase (GCK) family of proteins. SLK has a kinase domain located at the N terminus (1). The autophosphorylation of SLK at Thr183 and Ser189 is required for the upregulation of SLK kinase activity (1, 2). The protein also has a caspase cleavage site DXXD and a SH3 binding site PXXP located in the middle part of its sequence, and a regulatory C terminal coiled-coil domain for homodimerization and adaptor binding (1-4). SLK plays important roles in development, tissue regeneration and cancer cell migration by regulating several signaling pathways (5-7). SLK phosphorylates and activates ASK1 to induce downstream p38 phosphorylation and apoptosis (8,9). During cell cycle, SLK phosphorylates Polo-like kinase (PLK) at Thr210 to promote G2/M transition (10,11). SLK also promotes cell division by direct phosphorylation of ERMs and dynactin to activate microtubule reorganization and spindle orientation (12, 13). During focal adhesion and cell migration process, SLK is activated and colocalized to the focal adhesion complex where it promotes complex turnover by phosphorylating paxillin at Ser250 (14, 15).

Background References

1. Al-Zahrani, K.N. et al. (2013) *Cell Adh Migr* 7, 1-10.
2. Luhovy, A.Y. et al. (2012) *J Biol Chem* 287, 5446-58.
3. Delarosa, S. et al. (2011) *Am J Physiol Renal Physiol* 301, F554-64.
4. Baron, K.D. et al. (2015) *Biochim Biophys Acta* 1853, 1683-92.
5. Al-Zahrani, K.N. et al. (2014) *Dev Dyn* 243, 640-51.
6. Storbeck, C.J. et al. (2013) *Skelet Muscle* 3, 16.
7. Roovers, K. et al. (2009) *Oncogene* 28, 2839-48.
8. Hao, W. et al. (2006) *J Biol Chem* 281, 3075-84.
9. Sabourin, L.A. et al. (2000) *Mol Cell Biol* 20, 684-96.
10. Ellinger-Ziegelbauer, H. et al. (2000) *Genes Cells* 5, 491-8.
11. Johnson, T.M. et al. (2008) *Biochemistry* 47, 3688-96.
12. Zhapparova, O.N. et al. (2013) *Mol Biol Cell* 24, 3205-14.
13. Machicoane, M. et al. (2014) *J Cell Biol* 205, 791-9.
14. Wagner, S. et al. (2008) *PLoS One* 3, e1868.
15. Quizi, J.L. et al. (2013) *Oncogene* 32, 4656-63.

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 **IP:** Immunoprecipitation

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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