

# SLM-1 (M-15): sc-9473

## BACKGROUND

Sam 68 is phosphorylated on tyrosine and functions as a substrate for Src family tyrosine kinases during mitosis. Sam 68 also associates with several SH2 and SH3 domain-containing signaling proteins, such as GRB2 and PLC  $\gamma$ 1. Originally cloned as Ras GAP-associated p62, further investigations have shown that Sam 68 and Ras GAP-associated p62 are not antigenically related, nor are they encoded by the same gene. Like Sam 68, the Sam 68-like mammalian proteins, SLM-1 and SLM-2, demonstrate RNA binding activity. Also like Sam 68, SLM-1 is tyrosine phosphorylated and functions as an adapter protein for signaling molecules, including GRB2, PLC  $\gamma$ 1, Fyn and RasGAP. SLM-2 is not tyrosine phosphorylated, nor does it appear to associate with GRB2, PLC  $\gamma$ 1, Fyn or RasGAP, indicating that SLM-2 may not be an adapter protein for these proteins.

## REFERENCES

1. Fumagalli, S., et al. 1994. A target for Src in mitosis. *Nature* 368: 871-874.
2. Maa, M.C., et al. 1994. A protein that is highly related to GTPase-activating protein-associated p62 complexes with phospholipase C  $\gamma$ . *Mol. Cell. Biol.* 14: 5466-5473.
3. Richard, S., et al. 1995. Association of p62, a multifunctional SH2- and SH3-domain-binding protein, with Src family tyrosine kinases, GRB2, and phospholipase C  $\gamma$ 1. *Mol. Cell. Biol.* 15: 186-197.
4. Lock, P., et al. 1996. The human p62 cDNA encodes Sam68 and not the RasGAP-associated p62 protein. *Cell* 84: 23-24.
5. Guitard, E., et al. 1998. Sam68 is a Ras-GAP-associated protein in mitosis. *Biochem. Biophys. Res. Commun.* 245: 562-566.
6. Di Fruscio, M., et al. 1999. Characterization of Sam68-like mammalian proteins SLM-1 and SLM-2: SLM-1 is a Src substrate during mitosis. *Proc. Natl. Acad. Sci. USA* 96: 2710-2715.

## CHROMOSOMAL LOCATION

Genetic locus: KHDRBS2 (human) mapping to 6q11.1; Khdrbs2 (mouse) mapping to 1 B.

## SOURCE

SLM-1 (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SLM-1 of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9473 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

SLM-1 (M-15) is recommended for detection of SLM-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SLM-1 (M-15) is also recommended for detection of SLM-1 in additional species, including equine and canine.

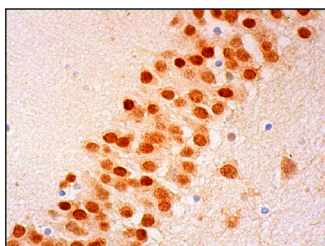
Suitable for use as control antibody for SLM-1 siRNA (h): sc-40920, SLM-1 siRNA (m): sc-40921, SLM-1 shRNA Plasmid (h): sc-40920-SH, SLM-1 shRNA Plasmid (m): sc-40921-SH, SLM-1 shRNA (h) Lentiviral Particles: sc-40920-V and SLM-1 shRNA (m) Lentiviral Particles: sc-40921-V.

Molecular Weight of SLM-1: 64 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



SLM-1 (M-15): sc-9473. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing nuclear staining of neuronal cells.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **SLM-1 (7G8C10): sc-517231**, our highly recommended monoclonal alternative to SLM-1 (M-15).