

SLM-2 (S-15): sc-9474

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 γ 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 γ 1, Fyn and RasGAP. SLM-2 is not tyrosine phosphorylated, nor does it appear to associate with GRB2, PLC γ 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 γ . *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 γ 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: KHDRBS3 (human) mapping to 8q24.23; Khdrbs3 (mouse) mapping to 15 D3.

SOURCE

SLM-2 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SLM-2 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9474 P, (100 μ 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-2 (S-15) is recommended for detection of SLM-2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SLM-2 (S-15) is also recommended for detection of SLM-2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SLM-2 siRNA (h): sc-40922, SLM-2 siRNA (m): sc-40923, SLM-2 shRNA Plasmid (h): sc-40922-SH, SLM-2 shRNA Plasmid (m): sc-40923-SH, SLM-2 shRNA (h) Lentiviral Particles: sc-40922-V and SLM-2 shRNA (m) Lentiviral Particles: sc-40923-V.

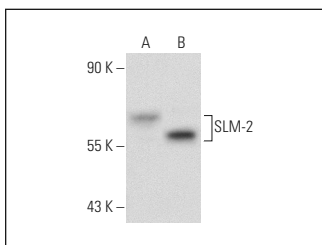
Molecular Weight of SLM-2: 55 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, SLM-2 (h3): 293T Lysate: sc-176558 or IMR-32 nuclear extract: sc-2148.

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.

DATA



SLM-2 (S-15): sc-9474. Western blot analysis of SLM-2 expression in non-transfected: sc-117752 (A) and human SLM-2 transfected: sc-176558 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.