

SLM-1 (7G8C10): sc-517231

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

SOURCE

SLM-1 (7G8C10) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 160-349 of SLM-1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

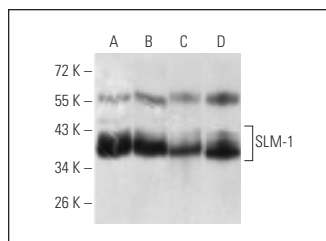
SLM-1 (7G8C10) is recommended for detection of SLM-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

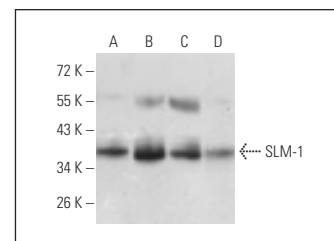
Molecular Weight of SLM-1: 64 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

DATA



SLM-1 (7G8C10): sc-517231. Western blot analysis of SLM-1 expression in K-562 (A), HEK293 (B), NTERA-2 (C) and HeLa (D) whole cell lysates.



SLM-1 (7G8C10): sc-517231. Western blot analysis of SLM-1 expression in Hep G2 (A), Jurkat (B), A-431 (C) and NIH/3T3 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Regalo, G., et al. 2016. C/EBP β regulates homeostatic and oncogenic gastric cell proliferation. *J. Mol. Med.* 94: 1385-1395.

RESEARCH USE

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