# SANTA CRUZ BIOTECHNOLOGY, INC.

# SLM-2 (h3): 293T Lysate: sc-176558



#### 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., Totty, N.F., Hsuan, J.J. and Courtneidge, S.A. 1994. A target for Src in mitosis. Nature 368: 871-874.
- Maa, M.C., Leu, T.H., Trandel, B.J., Chang, J.H. and Parsons, S.J. 1994. A protein that is highly related to GTPase-activating protein-associated p62 complexes with phospholipase C γ. Mol. Cell. Biol. 14: 5466-5473.
- Richard, S., Yu,D.,Blumer, K.J., Hausladen, D., Olszowy, M.W., Connelly, P.A. and Shaw, A.S. 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.
- Lock, P., Fumagalli, S., Polakis, P., McCormick, F. and Courtneidge, S.A. 1996. The human p62 cDNA encodes Sam68 and not the RasGAP-associated p62 protein. Cell 84: 23-24.
- Guitard, E., Barlat, I., Maurier, F., Schweighoffer, F. and Tocque, B. 1998. Sam68 is a Ras-GAP-associated protein in mitosis. Biochem. Biophys. Res. Commun. 245: 562-566.
- Di Fruscio, M., Chen, T. and Richard, S. 1999. Characterization of Sam68like 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.

## PRODUCT

SLM-2 (h3): 293T Lysate represents a lysate of human SLM-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### APPLICATIONS

SLM-2 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive SLM-2 antibodies. Recommended use:  $10-20 \mu$ J per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## **RESEARCH USE**

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

#### PROTOCOLS

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