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 PLCγ1. 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, PLCγ1, Fyn and RasGAP. SLM-2 is not tyrosine phosphorylated, nor does it appear to associate with GRB2, PLCγ1, Fyn or RasGAP, indicating that SLM-2 may not be an adapter protein for these proteins.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: KHDRBS1 (human) mapping to 1p35.1; Khdrbs1 (mouse) mapping to 4D2.2.

SOURCE

Sam 68 (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 416-443 at the C-terminus of Sam 68 of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-514468 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

Sam 68 (H-4) is recommended for detection of Sam 68 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for Sam 68 siRNA (h): sc-29476, Sam 68 siRNA (m): sc-36451, Sam 68 shRNA Plasmid (h): sc-29476-SH, Sam 68 shRNA Plasmid (m): sc-36451-SH, Sam 68 shRNA (h) Lentiviral Particles: sc-29476-V and Sam 68 shRNA (m) Lentiviral Particles: sc-36451-V.

Molecular Weight of Sam 68: 68 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, Jurkat whole cell lysate: sc-2204 or Sam 68 (m): 293T Lysate: sc-125954.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

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.