

SH2-B (H-89): sc-366009

BACKGROUND

SH2-B, also known as SH2B1 or PSM, is a 756 amino acid protein that is a component of the signaling network and is involved in the regulation of cell shape and movement. SH2-B is related to the APS (adapter molecule containing PH and SH2 domains) family of adapter proteins, which characteristically contain a pleckstrin homology (PH) domain, an SH2 domain and a tyrosine phosphorylation site. SH2-B is alternatively spliced to generate three distinct isoforms, SH2-B α , β , and γ , that share an identical N-terminal sequence, including the PH domain, the SH2 domain, and multiple proline-rich motifs. Containing a PH domain and a SH2 domain, SH2-B shuttles between the nucleus and the cytoplasm. SH2-B is widely expressed with highest expression in skeletal muscle and ovary. SH2-B is phosphorylated on tyrosine residues in response to receptor kinase stimulation.

REFERENCES

1. Frank, S.J., et al. 1995. Regions of the JAK2 tyrosine kinase required for coupling to the growth hormone receptor. *J. Biol. Chem.* 270: 14776-14785.
2. Rui, L., et al. 1997. Identification of SH2-B β as a substrate of the tyrosine kinase JAK2 involved in growth hormone signaling. *Mol. Cell. Biol.* 17: 6633-6644.

CHROMOSOMAL LOCATION

Genetic locus: SH2B1 (human) mapping to 16p11.2.

SOURCE

SH2-B (H-89) is a rabbit polyclonal antibody raised against amino acids 334-422 mapping within an internal region of SH2-B of human origin.

PRODUCT

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

APPLICATIONS

SH2-B (H-89) is recommended for detection of SH2-B 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SH2-B (H-89) is also recommended for detection of SH2-B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SH2-B siRNA (h): sc-44095, SH2-B siRNA (m): sc-40333, SH2-B shRNA Plasmid (h): sc-44095-SH, SH2-B shRNA Plasmid (m): sc-40333-SH, SH2-B shRNA (h) Lentiviral Particles: sc-44095-V and SH2-B shRNA (m) Lentiviral Particles: sc-40333-V.

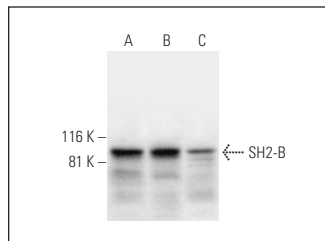
Molecular Weight of SH2-B isoforms: 80-90 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287, ES-2 cell lysate: sc-24674 or OV-90 whole cell lysate: sc-364191.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SH2-B (H-89): sc-366009. Western blot analysis of SH2-B expression in SJRH30 (A), ES-2 (B) and OV-90 (C) whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **SH2-B (E-8): sc-393395** or **SH2-B $\alpha/\beta/\gamma/\delta$ (C-11): sc-514142**, our highly recommended monoclonal alternatives to SH2-B (H-89).