

SR- β (C-16): sc-100169

BACKGROUND

The β -subunit of the signal recognition particle receptor (SR- β), a member of the Ras family of small molecular weight GTPases, targets nascent polypeptides to the protein translocation machinery in the ER. The signal recognition particle receptor (SRP) is a heterodimer of two polypeptides, SR- α and SR- β , that are 72 kDa and 30 kDa respectively. The interaction of three GTPases, SRP54, SR- α , and SR- β , controls cotranslational protein transport to the ER. SR- β regulates the interaction of SR with the ribosome and thereby allows SR- α to scan membrane-bound ribosomes for the presence of SRP.

REFERENCES

- Young, J.C., et al. 1995. An amino-terminal domain containing hydrophobic and hydrophilic sequences binds the signal recognition particle receptor α subunit to the β subunit on the endoplasmic reticulum membrane. *J. Biol. Chem.* 270: 15650-15657.
- Bacher, G., et al. 1999. The ribosome regulates the GTPase of the β -subunit of the signal recognition particle receptor. *J. Cell Biol.* 146: 723-730.

CHROMOSOMAL LOCATION

Genetic locus: SRPRB (human) mapping to 3q22.1; Srprb (mouse) mapping to 9 F1.

SOURCE

SR- β (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SR- β 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.

Blocking peptide available for competition studies, sc-100169 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SR- β (C-16) is recommended for detection of SR- β 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); non cross-reactive with other SR family members.

SR- β (C-16) is also recommended for detection of SR- β in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SR- β siRNA (h): sc-78449, SR- β siRNA (m): sc-153813, SR- β shRNA Plasmid (h): sc-78449-SH, SR- β shRNA Plasmid (m): sc-153813-SH, SR- β shRNA (h) Lentiviral Particles: sc-78449-V and SR- β shRNA (m) Lentiviral Particles: sc-153813-V.

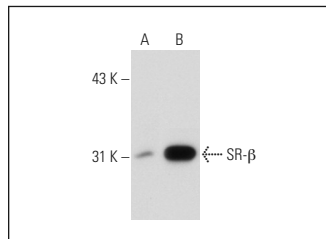
Molecular Weight of SR- β : 30 kDa.

Positive Controls: SR- β (h): 293T Lysate: sc-117123 or SR- β (m): 293T Lysate: sc-123766.

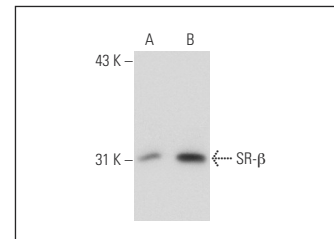
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



SR- β (C-16): sc-100169. Western blot analysis of SR- β expression in non-transfected: sc-117752 (A) and mouse SR- β transfected: sc-123766 (B) 293T whole cell lysates.



SR- β (C-16): sc-100169. Western blot analysis of SR- β expression in non-transfected: sc-117752 (A) and human SR- β transfected: sc-117123 (B) 293T 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 **SR- β (D-4): sc-376723**, our highly recommended monoclonal alternative to SR- β (C-16).