SANTA CRUZ BIOTECHNOLOGY, INC.

Sec63 (N-20): sc-12328

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In mammalian cells, protein translocation across the endoplasmic reticulum (ER) membrane is almost exclusively co-translational. This transport depends on the Sec61 complex, which is homologous to the yeast Sec61p complex and has been identified in mammals as a ribosome-bound pore-forming membrane protein complex. The Sec61 complex associates with two ubiquitous ER membrane proteins Sec62 (also designated human translocation protein 1 or HTP1) and Sec63. The Sec61 complex forms the hydrophilic pore in the membrane through which the nascent polypeptide is translocated. Sec61p seems to be the evolutionary conserved component since homologs of Sec61p have been found both in bacteria and mammals. Sec62 is expressed in various human tissues such as the heart, brain, placenta, liver and pancreas.

REFERENCES

1. Simon, S.M. and Blobel, G. 1991. A protein-conducting channel in the endoplasmic reticulum. Cell 65: 371-380.
2. Görlich, D. and Rapoport, T.A. 1993. Protein translocation into proteoliposomes reconstituted from purified components of the endoplasmic reticulum membrane. Cell 75: 615-630.

CHROMOSOMAL LOCATION

Genetic locus: SEC63 (human) mapping to 6q21; Sec63 (mouse) mapping to 10 B2.

SOURCE

Sec63 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sec63 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-12328 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sec63 (N-20) is recommended for detection of Sec63 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Sec63 (N-20) is also recommended for detection of Sec63 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Sec63 siRNA (h): sc-41288, Sec63 siRNA (m): sc-41289, Sec63 shRNA Plasmid (h): sc-41288-SH, Sec63 shRNA Plasmid (m): sc-41289-SH, Sec63 shRNA (h) Lentiviral Particles: sc-41288-V and Sec63 shRNA (m) Lentiviral Particles: sc-41289-V.

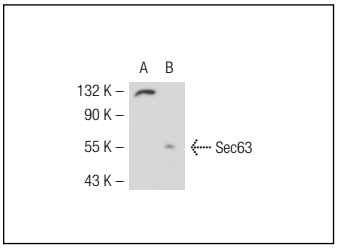
Molecular Weight of Sec63: 97 kDa.

Positive Controls: Sec63 (m): 293T Lysate: sc-123429.

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



Sec63 (N-20): sc-12328. Western blot analysis of Sec63 expression in non-transfected: sc-117752 (**A**) and mouse Sec63 transfected: sc-123429 (**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.