

Sec61 β (N-15): sc-27694

BACKGROUND

The Sec61 complex forms the core element of the protein translation complex in the rough endoplasmic reticulum membrane. The complex also associates with two ubiquitous ER membrane proteins: Sec62 (also designated human translocation protein 1 or HTP1) and Sec63. The complex forms a two-way channel that transports proteins both into the ER and back to the cytosol for degradation. Specifically, it appears the β subunit facilitates the escort of proteins back to the cytoplasm for degradation by the proteasome or by other proteolytic systems.

REFERENCES

1. Rapoport, T.A., et al. 1996. Protein transport across the eukaryotic endoplasmic reticulum and bacterial inner membranes. *Annu. Rev. Biochem.* 65: 271-303.
2. Daimon, M., et al. 1997. Identification of a human cDNA homologue to the *Drosophila* translocation protein 1 (Dtrp1). *Biochem. Biophys. Res. Commun.* 230: 100-104.
3. Bekob, Z., et al. 1998. The mechanism underlying cystic fibrosis transmembrane conductance regulator transport from the endoplasmic reticulum to the proteasome includes Sec61 β and a cytosolic, deglycosylated intermediary. *J. Biol. Chem.* 273: 29873-29878.
4. Romisch, K. 1999. Surfing the Sec61 channel: bidirectional protein translocation across the ER membrane. *J. Cell Sci.* 112: 4185-4191.
5. Raden, D., et al. 2000. Role of the cytoplasmic segments of Sec61 α in the ribosome-binding and translocation-promoting activities of the Sec61 complex. *J. Cell Biol.* 150: 53-64.
6. Meyer, H.A., et al. 2000. Mammalian Sec61 is associated with Sec62 and Sec63. *J. Biol. Chem.* 275: 14550-14557.
7. Levy, R., et al. 2001. *In vitro* binding of ribosomes to the β subunit of the Sec61p protein translocation complex. *J. Biol. Chem.* 276: 2340-2346.

CHROMOSOMAL LOCATION

Genetic locus: SEC61B (human) mapping to 9q22.33; Sec61b (mouse) mapping to 4 B1.

SOURCE

Sec61 β (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of Sec61 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-27694 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Sec61 β (N-15) is recommended for detection of Sec61 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).

Suitable for use as control antibody for Sec61 β siRNA (h): sc-106868, Sec61 β siRNA (m): sc-155966, Sec61 β shRNA Plasmid (h): sc-106868-SH, Sec61 β shRNA Plasmid (m): sc-155966-SH, Sec61 β shRNA (h) Lentiviral Particles: sc-106868-V and Sec61 β shRNA (m) Lentiviral Particles: sc-155966-V.

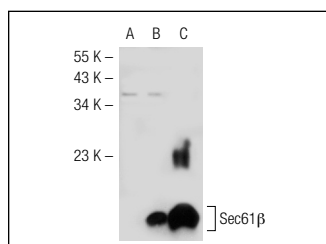
Molecular Weight of Sec61 β : 9 kDa.

Positive Controls: mouse pancreas extract: sc-364244 or Sec61 β (m): 293T Lysate: sc-125973.

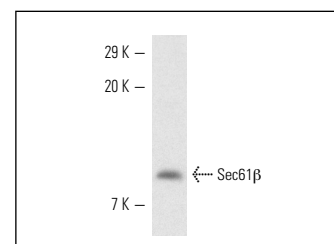
RECOMMENDED SECONDARY REAGENTS

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 MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerTM 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 UltraCruzTM Mounting Medium: sc-24941.

DATA



Sec61 β (N-15): sc-27694. Western blot analysis of Sec61 β expression in non-transfected: sc-117752 (A) and mouse Sec61 β transfected: sc-125973 (B) 293T whole cell lysates and mouse pancreas tissue extract (C).



Sec61 β (N-15): sc-27694. Western blot analysis of Sec61 β expression in mouse pancreas tissue extract.

RESEARCH USE

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



Try **Sec61 β (E-6): sc-393633**, our highly recommended monoclonal alternative to Sec61 β (N-15).