

# SEC11C (N-20): sc-85139

## BACKGROUND

Amino terminal signal sequence of proteins targeted to the endoplasmic reticulum (ER) is usually removed by a membrane signal peptidase during or shortly after translocation into the ER. SEC11C, also known as SPC21, SPCS4C, or SEC11L3, is a 192 amino acid catalytic subunit of the microsomal signal peptidase complex that belongs to the peptidase S26B family. SEC11C is a microsome membrane protein that removes signal peptides from nascent proteins as they are translocated into the lumen of the ER. SEC11C is a component of the microsomal signal peptidase complex that consists of five members: SEC11A, SEC11C, SPCS1, SPCS2 and SPCS3.

## REFERENCES

1. Böhni, P.C., Deshaies, R.J. and Schekman, R.W. 1988. SEC11 is required for signal peptide processing and yeast cell growth. *J. Cell Biol.* 106: 1035-1042.
2. Greenburg, G., Shelness, G.S. and Blobel, G. 1989. A subunit of mammalian signal peptidase is homologous to yeast SEC11 protein. *J. Biol. Chem.* 264: 15762-15765.
3. Shelness, G.S. and Blobel, G. 1990. Two subunits of the canine signal peptidase complex are homologous to yeast SEC11 protein. *J. Biol. Chem.* 265: 9512-9519.
4. YaDeau, J.T., Klein, C. and Blobel, G. 1991. Yeast signal peptidase contains a glycoprotein and the SEC11 gene product. *Proc. Natl. Acad. Sci. USA* 88: 517-521.
5. van Diji, J.M., de Jong, A., Vehmaanperä, J., Venema, G. and Bron, S. 1992. Signal peptidase I of *Bacillus subtilis*: patterns of conserved amino acids in prokaryotic and eukaryotic type I signal peptidases. *EMBO J.* 11: 2819-2828.
6. Shelness, G.S., Lin, L. and Nicchitta, C.V. 1993. Membrane topology and biogenesis of eukaryotic signal peptidase. *J. Biol. Chem.* 268: 5201-5208.

## CHROMOSOMAL LOCATION

Genetic locus: SEC11C (human) mapping to 18q21.32.

## SOURCE

SEC11C (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SEC11C 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-85139 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

SEC11C (N-20) is recommended for detection of SEC11C of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SEC11C (N-20) is also recommended for detection of SEC11C in additional species, including equine and canine.

Suitable for use as control antibody for SEC11C siRNA (h): sc-76464, SEC11C shRNA Plasmid (h): sc-76464-SH and SEC11C shRNA (h) Lentiviral Particles: sc-76464-V.

Molecular Weight of SEC11C: 21 kDa.

## 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) 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.