SANTA CRUZ BIOTECHNOLOGY, INC.

SEC16S (K-15): sc-160780

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SEC16S, also known as SEC16 homolog B, RGPR, RGPR-p117 (regucalcin gene promoter region-related protein p117) or LZTR2 (leucine zipper transcription regulator 2), is a 1,060 amino acid peripheral membrane protein of the Golgi apparatus and endoplasmic reticuclum that is required for normal transitional endoplasmic reticulum (tER) organization. A member of the SEC16 family, SEC16S is the mammalian homolog of *S. cerevisiae* Sec16, which is essential during protein export. SEC16S functions as a transcription factor by binding the TTGGC motif of SMP30 (also known as regucalcin), thereby enhancing regucalcin mRNA expression. Ubiquitously expressed and existing as three alternatively spliced isoforms, SEC16S is encoded by a gene that maps to human chromosome 1q25.2.

REFERENCES

1. Misawa, H. and Yamaguchi, M. 2001. Molecular cloning and sequencing of the cDNA coding for a novel regucalcin gene promoter region-related protein in rat, mouse and human liver. Int. J. Mol. Med. 8: 513-520.
2. Bhattacharyya, D. and Glick, B.S. 2007. Two mammalian Sec16 homologues have nonredundant functions in endoplasmic reticulum (ER) export and transitional ER organization. Mol. Biol. Cell 18: 839-849.
3. Hotta, K., et al. 2009. Association between obesity and polymorphisms in SEC16B, TMEM18, GNPDA2, BDNF, FAIM2 and MC4R in a Japanese population. J. Hum. Genet. 54: 727-731.
4. Yamaguchi, M. 2009. Novel protein RGPR-p117: its role as the regucalcin gene transcription factor. Mol. Cell. Biochem. 327: 53-63.
5. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612855. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: SEC16B (human) mapping to 1q25.2; Sec16b (mouse) mapping to 1 H1.

SOURCE

SEC16S (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SEC16S 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-160780 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.

RESEARCH USE

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

APPLICATIONS

SEC16S (K-15) is recommended for detection of SEC16S of mouse, rat and 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); non cross-reactive with SEC16L or SEC16A.

SEC16S (K-15) is also recommended for detection of SEC16S in additional species, including canine.

Suitable for use as control antibody for SEC16S siRNA (h): sc-88323, SEC16S siRNA (m): sc-153304, SEC16S shRNA Plasmid (h): sc-88323-SH, SEC16S shRNA Plasmid (m): sc-153304-SH, SEC16S shRNA (h) Lentiviral Particles: sc-88323-V and SEC16S shRNA (m) Lentiviral Particles: sc-153304-V.

Molecular Weight of SEC16S: 117 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.