

TRAPPC8 (K-20): sc-85192

BACKGROUND

TRS85, also designated Gsg1 or HsT2706, is a 1,435 amino acid Golgi apparatus protein belonging to the TRS85 family. A component of the multisubunit TRAPP (transport protein particle) complex, a well-characterized multisubunit tethering complex that acts as a GTP exchange factor, TRS85 may play a role in vesicular transport from endoplasmic reticulum to Golgi apparatus. In *Saccharomyces cerevisiae*, TRS85 is required for nonspecific autophagy, pexophagy and the cytoplasm to vacuole targeting (Cvt) pathway. Existing as two alternatively spliced isoforms, TRS85 is encoded by a gene located on human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

1. Carstea, E.D., Polymeropoulos, M.H., Parker, C.C., Detera-Wadleigh, S.D., O'Neill, R.R., Patterson, M.C., Goldin, E., Xiao, H., Straub, R.E. and Vanier, M.T. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. *Proc. Natl. Acad. Sci. USA* 90: 2002-2004.
2. Nazarko, T.Y., Huang, J., Nicaud, J.M., Klionsky, D.J. and Sibirny, A.A. 2005. TRS85 is required for macroautophagy, pexophagy and cytoplasm to vacuole targeting in *Yarrowia lipolytica* and *Saccharomyces cerevisiae*. *Autophagy* 1: 37-45.
3. Meiling-Wesse, K., Epple, U.D., Krick, R., Barth, H., Appelles, A., Voss, C., Eskelinen, E.L. and Thumm, M. 2005. TRS85 (Gsg1), a component of the TRAPP complexes, is required for the organization of the preautophagosomal structure during selective autophagy via the Cvt pathway. *J. Biol. Chem.* 280: 33669-33678.
4. Kim, Y.G., Raunser, S., Munger, C., Wagner, J., Song, Y.L., Cygler, M., Walz, T., Oh, B.H. and Sacher, M. 2006. The architecture of the multisubunit TRAPP I complex suggests a model for vesicle tethering. *Cell* 127: 817-830.
5. Liang, Y., Morozova, N., Tokarev, A.A., Mulholland, J.W. and Segev, N. 2007. The role of TRS65 in the Ypt/Rab guanine nucleotide exchange factor function of the TRAPP II complex. *Mol. Biol. Cell* 18: 2533-2541.
6. Sacher, M., Kim, Y.G., Lavie, A., Oh, B.H. and Segev, N. 2008. The TRAPP complex: insights into its architecture and function. *Traffic* 9: 2032-2042.
7. Montpetit, B. and Conibear, E. 2009. Identification of the novel TRAPP associated protein TCA17. *Traffic* 10: 713-723.

CHROMOSOMAL LOCATION

Genetic locus: TRAPPC8 (human) mapping to 18q12.1.

SOURCE

TRAPPC8 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRAPPC8 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-85192 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRAPPC8 (K-20) is recommended for detection of TRAPPC8 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).

TRAPPC8 (K-20) is also recommended for detection of TRAPPC8 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TRAPPC8 siRNA (h): sc-76761, TRAPPC8 shRNA Plasmid (h): sc-76761-SH and TRAPPC8 shRNA (h) Lentiviral Particles: sc-76761-V.

Molecular Weight of TRAPPC8: 161 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.

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.