

SUGT1 (C-19): sc-84623

BACKGROUND

SUGT1 (suppressor of G₂ allele of Skp1 p19 homolog, *S. cerevisiae*), also known as SGT1, is a homolog of the yeast protein Sgt1, a regulator of the cell cycle that is essential for G₁/S and G₂/M transitions. SUGT1 is a highly soluble protein and shares 26% overall amino acid identity and 30% overall similarity with its yeast counterpart. Localizing to the nucleus and cytoplasm, SUGT1 contains a CS domain, an SGS domain, a p23 domain and three tetratricopeptide repeats (TPR). The function of SUGT1 is conserved across eukaryotes. SUGT1 associates with Skp1 p19 and CUL-1, subunits of the SCF (Skp1-Cullin-F-box) ubiquitin ligase complex, and is believed to play a role in protein degradation. In addition, SUGT1 is required for the assembly of kinetochores and functions as a co-chaperone for HSP 90. An additional isoform, SUGT1B (also known as SGT1B), exists for SUGT1 due to alternative splicing events.

REFERENCES

1. Kitagawa, K., Skowrya, D., Elledge, S.J., Harper, J.W. and Hieter, P. 1999. SGT1 encodes an essential component of the yeast kinetochore assembly pathway and a novel subunit of the SCF ubiquitin ligase complex. *Mol. Cell* 4: 21-33.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604098. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Niikura, Y. and Kitagawa, K. 2003. Identification of a novel splice variant: human SGT1B (SUGT1B). *DNA Seq.* 14: 436-441.
4. Steensgaard, P., Garrè, M., Muradore, I., Transidico, P., Nigg, E.A., Kitagawa, K., Earnshaw, W.C., Faretta, M. and Musacchio, A. 2004. SGT1 is required for human kinetochore assembly. *EMBO Rep.* 5: 626-631.
5. Zou, X., Ji, C., Wang, L., Wu, M., Zheng, H., Xu, J., Jin, F., Gu, S., Ying, K., Xie, Y. and Mao, Y. 2004. Molecular cloning and characterization of SGT1.2, a novel splice variant of *Homo sapiens* SGT1. *DNA Seq.* 15: 140-143.
6. So, T., Takenoyama, M., Mizukami, M., Ichiki, Y., Sugaya, M., Hanagiri, T., Sugio, K. and Yasumoto, K. 2005. Haplotype loss of HLA class I antigen as an escape mechanism from immune attack in lung cancer. *Cancer Res.* 65: 5945-5952.
7. Spiechowicz, M. and Filipek, A. 2005. The expression and function of SGT1 protein in eukaryotic cells. *Acta Neurobiol. Exp.* 65: 161-165.
8. Spiechowicz, M., Bernstein, H.G., Dobrowolny, H., Lesniak, W., Mawrin, C., Bogerts, B., Kuznicki, J. and Filipek, A. 2006. Density of SGT1-immunopositive neurons is decreased in the cerebral cortex of Alzheimer's disease brain. *Neurochem. Int.* 49: 487-493.

CHROMOSOMAL LOCATION

Genetic locus: SUGT1 (human) mapping to 13q14.3; Sgt1 (mouse) mapping to 14 D3.

SOURCE

SUGT1 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of SUGT1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84623 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SUGT1 (C-19) is recommended for detection of SUGT1 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).

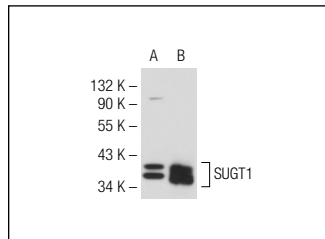
SUGT1 (C-19) is also recommended for detection of SUGT1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SUGT1 siRNA (h): sc-76605, SUGT1 siRNA (m): sc-153916, SUGT1 shRNA Plasmid (h): sc-76605-SH, SUGT1 shRNA Plasmid (m): sc-153916-SH, SUGT1 shRNA (h) Lentiviral Particles: sc-76605-V and SUGT1 shRNA (m) Lentiviral Particles: sc-153916-V.

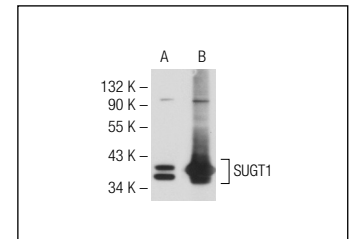
Molecular Weight of SUGT1: 38 kDa.

Positive Controls: SUGT1 (m): 293 Lysate: sc-110740 or HeLa whole cell lysate: sc-2200.

DATA



SUGT1 (C-19): sc-84623. Western blot analysis of SUGT1 expression in non-transfected: sc-110760 (A) and mouse SUGT1 transfected: sc-110740 (B) 293 whole cell lysates.



SUGT1 (C-19): sc-84623. Western blot analysis of SUGT1 expression in non-transfected: sc-117752 (A) and mouse SUGT1 transfected: sc-110248 (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.

MONOS
Satisfaction
Guaranteed

Try **SUGT1 (B-10): sc-398625** or **SUGT1 (B-3): sc-398639**, our highly recommended monoclonal alternatives to SUGT1 (C-19).