

SLC35C2 (K-13): sc-85923

BACKGROUND

SLC35C2 (solute carrier family 35, member C2), also known as C20orf5, OVCOV1 or CGI-15, is a 365 amino acid multi-pass membrane protein that belongs to the TPT transporter family and exists as multiple alternatively spliced isoforms. Expressed ubiquitously and functionally induced in hypoxic trophoblast cells, SLC35C2 plays a role in the cellular response to tissue hypoxia and is thought to be involved in the pathogenesis of ovarian cancer. The gene encoding SLC35C2 maps to human chromosome 20, which houses over 600 genes some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, RING chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought important for seminal production and may be potential targets for male contraception.

REFERENCES

1. Leach, R., Duniec-Dmuchowski, Z., Tanaka, T., Ko, M.S. and Krawetz, S.A. 2001. Assignment of OVCOV1 (alias CGI-15) to human chromosome 20 band q13.1→q13.2 by fluorescent *in situ* hybridization. *Cytogenet. Cell Genet.* 94: 252-253.
2. Lash, G.E., Postovit, L.M., Matthews, N.E., Chung, E.Y., Canning, M.T., Pross, H., Adams, M.A. and Graham, C.H. 2002. Oxygen as a regulator of cellular phenotypes in pregnancy and cancer. *Can. J. Physiol. Pharmacol.* 80: 103-109.
3. Leach, R.E., Duniec-Dmuchowski, Z.M., Pesole, G., Tanaka, T.S., Ko, M.S., Armant, D.R. and Krawetz, S.A. 2002. Identification, molecular characterization, and tissue expression of OVCOV1. *Mamm. Genome* 13: 619-624.
4. Chen, W., Tang, J. and Stanley, P. 2005. Suppressors of $\alpha(1,3)$ fucosylation identified by expression cloning in the LEC11B gain-of-function CHO mutant. *Glycobiology* 15: 259-269.
5. Jóó, J.G., Beke, A., Tóth-Pál, E., Hargitai, B., Szigeti, Z., Papp, C. and Papp, Z. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. *J. Reprod. Med.* 51: 209-212.
6. Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the RING chromosome 20 syndrome. *Epilepsia* 47: 543-549.

CHROMOSOMAL LOCATION

Genetic locus: SLC35C2 (human) mapping to 20q13.12; Slc35c2 (mouse) mapping to 2 H3.

SOURCE

SLC35C2 (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SLC35C2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 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-85923 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC35C2 (K-13) is recommended for detection of SLC35C2 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).

SLC35C2 (K-13) is also recommended for detection of SLC35C2 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for SLC35C2 siRNA (h): sc-76509, SLC35C2 siRNA (m): sc-153535, SLC35C2 shRNA Plasmid (h): sc-76509-SH, SLC35C2 shRNA Plasmid (m): sc-153535-SH, SLC35C2 shRNA (h) Lentiviral Particles: sc-76509-V and SLC35C2 shRNA (m) Lentiviral Particles: sc-153535-V.

Molecular Weight of SLC35C2: 40 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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 or our catalog for detailed protocols and support products.