IGSF4C (C-14): sc-240581



The Power to Question

BACKGROUND

IGSF4C (immunoglobulin superfamily member 4C), also known as CADM4 (cell adhesion molecule 4), NECL4 or TSLL2, is a 388 amino acid single-pass type I membrane protein that contains one Ig-like V-type domain and 2 Ig-like C2-type domains. Expressed in kidney, brain and prostate, IGSF4C exists as both a monomer and a homodimer and is thought to be involved in cell-cell adhesion, possibly playing a role in tumor suppression. Human IGSF4C shares 98% sequence identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding IGSF4C maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

- 1. Fukuhara, H., et al. 2001. Isolation of the TSLL1 and TSLL2 genes, members of the tumor suppressor TSLC1 gene family encoding transmembrane proteins. Oncogene 20: 5401-5407.
- 2. Murakami, Y. 2002. Functional cloning of a tumor suppressor gene, TSLC1, in human non-small cell lung cancer. Oncogene 21: 6936-6948.
- Mao, X., et al. 2003. The cytoplasmic domain is critical to the tumor suppressor activity of TSLC1 in non-small cell lung cancer. Cancer Res. 63: 7979-7985.
- Fukami, T., et al. 2003. Isolation of the mouse TsII1 and TsII2 genes, orthologues of the human TSLC1-like genes 1 and 2 (TSLL1 and TSLL2). Gene 323: 11-18.
- Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609744. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Williams, Y.N., et al. 2006. Cell adhesion and prostate tumor-suppressor activity of TSLL2/IGSF4C, an immunoglobulin superfamily molecule homologous to TSLC1/IGSF4. Oncogene 25: 1446-1453.

CHROMOSOMAL LOCATION

Genetic locus: CADM4 (human) mapping to 19q13.31; Cadm4 (mouse) mapping to 7 A3.

SOURCE

IGSF4C (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of IGSF4C of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240581 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IGSF4C (C-14) is recommended for detection of IGSF4C 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 IGSF4B or IGSF4D.

IGSF4C (C-14) is also recommended for detection of IGSF4C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for IGSF4C siRNA (h): sc-97491, IGSF4C siRNA (m): sc-146190, IGSF4C shRNA Plasmid (h): sc-97491-SH, IGSF4C shRNA Plasmid (m): sc-146190-SH, IGSF4C shRNA (h) Lentiviral Particles: sc-97491-V and IGSF4C shRNA (m) Lentiviral Particles: sc-146190-V.

Molecular Weight of IGSF4C: 43 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) 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**