SANTA CRUZ BIOTECHNOLOGY, INC.

IGSF3 (C-14): sc-138349

BACKGROUND

IGSF3 (immunoglobulin superfamily, member 3), also known as V8 or EWI-3, is a 1,214 amino acid protein. Widely expressed with predominant expression in kidney, placenta and lung, IGSF3 localizes to the membrane and contains an N-terminal signal peptide, eight immunoglobulin (Ig) domains and a transmembrane segment. IGSF3 exhibits strong sequence and structural similarity to CD101 (32% identity), a leukocyte surface protein with seven Ig domains that is believed to play a role in T-cell activation. Despite the structural similarities between IGSF3 and CD101, IGSF3 is not expressed in peripheral blood lymphocytes and does not appear to participate in an immune function. Based on its subcellular localization and the presence of the eight Ig domains, IGSF3 is hypothesized to function as a surface receptor or as a cell adhesion molecule.

REFERENCES

1. Saupe, S., et al. 1998. Molecular cloning of a human cDNA IGSF3 encoding an immunoglobulin-like membrane protein: expression and mapping to chromosome band 1p13. Genomics 52: 305-311.
2. Stipp, C.S., et al. 2001. EWI-2 is a major CD9 and CD81 partner and member of a novel Ig protein subfamily. J. Biol. Chem. 276: 40545-40554.
3. Clark, K.L., et al. 2001. PGRL is a major CD81-associated protein on lymphocytes and distinguishes a new family of cell surface proteins. J. Immunol. 167: 5115-5121.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603491. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Babcock, M., et al. 2003. Shuffling of genes within low-copy repeats on 22q11 (LCR22) by Alu-mediated recombination events during evolution. Genome Res. 13: 2519-2532.
6. Sakamoto, S., et al. 2004. Cells previously desensitized to type 1 interferons display different mechanisms of activation of stat-dependent gene expression from naïve cells. J. Biol. Chem. 279: 3245-3253.

CHROMOSOMAL LOCATION

Genetic locus: IGSF3 (human) mapping to 1p13.1; Igsf3 (mouse) mapping to 3 F2.2.

SOURCE

IGSF3 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of IGSF3 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-138349 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IGSF3 (C-14) is recommended for detection of IGSF3 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 other IGSF family members.

IGSF3 (C-14) is also recommended for detection of IGSF3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for IGSF3 siRNA (h): sc-78899, IGSF3 siRNA (m): sc-146189, IGSF3 shRNA Plasmid (h): sc-78899-SH, IGSF3 shRNA Plasmid (m): sc-146189-SH, IGSF3 shRNA (h) Lentiviral Particles: sc-78899-V and IGSF3 shRNA (m) Lentiviral Particles: sc-146189-V.

Molecular Weight of IGSF3: 137 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.