



## IGSF8 (S-15): sc-103563

### BACKGROUND

IGSF8 (immunoglobulin superfamily, member 8), also known as EW12, PGRL, CD316 or CD81P3, is a 613 amino acid single-pass membrane protein that contains four Ig-like C2-type domains and exists as multiple alternatively spliced isoforms. Expressed in testis, brain, liver, kidney and placenta, IGSF8 interacts with KAI 1 and is thought to play a role in oocyte fertilization and hepatitis C viral function. IGSF8 may also be involved in keratinocyte differentiation, cell motility and the outgrowth and maintenance of neural networks in the adult brain. The gene encoding IGSF8 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

### REFERENCES

1. Stipp, C.S., et al. 2001. EW1-2 is a major CD9 and CD81 partner and member of a novel Ig protein subfamily. *J. Biol. Chem.* 276: 40545-40554.
2. 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.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606644. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Charrin, S., et al. 2003. EW1-2 is a new component of the tetraspanin web in hepatocytes and lymphoid cells. *Biochem. J.* 373: 409-421.
5. Bonkobara, M., et al. 2003. Identification of novel genes for secreted and membrane-anchored proteins in human keratinocytes. *Br. J. Dermatol.* 148: 654-664.
6. Zhang, X.A., et al. 2003. EW12/PGRL associates with the metastasis suppressor KAI1/CD82 and inhibits the migration of prostate cancer cells. *Cancer Res.* 63: 2665-2674.
7. Stipp, C.S., et al. 2003. EW1-2 regulates  $\alpha3/\beta1$  integrin-dependent cell functions on Laminin-5. *J. Cell Biol.* 163: 1167-1177.
8. Kolesnikova, T.V., et al. 2004. EW1-2 modulates lymphocyte Integrin  $\alpha4/\beta1$  functions. *Blood* 103: 3013-3019.
9. Rocha-Perugini, V., et al. 2008. The CD81 partner EW1-2wint inhibits hepatitis C virus entry. *PLoS ONE* 3: e1866.

### CHROMOSOMAL LOCATION

Genetic locus: IGSF8 (human) mapping to 1q23.2; Igsf8 (mouse) mapping to 1 H3.

### SOURCE

IGSF8 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IGSF8 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103563 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

IGSF8 (S-15) is recommended for detection of IGSF8 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.

Suitable for use as control antibody for IGSF8 siRNA (h): sc-78686, IGSF8 siRNA (m): sc-105564, IGSF8 shRNA Plasmid (h): sc-78686-SH, IGSF8 shRNA Plasmid (m): sc-105564-SH, IGSF8 shRNA (h) Lentiviral Particles: sc-78686-V and IGSF8 shRNA (m) Lentiviral Particles: sc-105564-V.

Molecular Weight of IGSF8: 70 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](http://www.scbt.com) or our catalog for detailed protocols and support products.