

IGSF1 (F-7): sc-393786

BACKGROUND

IGSF1 (immunoglobulin superfamily member 1, inhibin-binding protein) is a highly glycosylated immunoglobulin domain-containing protein. IGSF1 has been shown to act as a coreceptor in inhibin signaling, however, it does not appear to be a high-affinity inhibin receptor by itself. May reduce or inhibit activin A signaling and is believed to be necessary in the mediation of specific effects of inhibin B on activin-stimulated transcription. IGSF1 has been found to interact with several members of the ACVR family and possibly some members of the BMPR group. There are three known isoforms of IGSF1, with one and two likely being multi-pass membrane proteins. Isoform 3 is believed to be expressed as a secreted form. Expression is high in pancreas, testis and fetal liver, while heart, prostate and small intestine show only moderate expression. IGSF1 may be found at very low levels in brain, muscle, thymus, ovary, colon, fetal lung and fetal kidney. Isoform 3 has been detected in pituitary gland.

REFERENCES

1. Mazzarella, R., et al. 1998. Cloning and expression of an immunoglobulin superfamily gene (IGSF1) in Xq25. *Genomics* 48: 157-162.
2. Joerger, T.R., et al. 1999. Conservation of cyst-cys trp structural triads and their geometry in the protein domains of immunoglobulin superfamily members. *Mol. Immunol.* 36: 373-386.
3. Luo, K., et al. 2001. DlgR1, a novel membrane receptor of the immunoglobulin gene superfamily, is preferentially expressed by antigen-presenting cells. *Biochem. Biophys. Res. Commun.* 287: 35-41.
4. Tanaka, S., et al. 2002. Detection of autoantibodies against the pituitary-specific proteins in patients with lymphocytic hypophysitis. *Eur. J. Endocrinol.* 147: 767-775.

CHROMOSOMAL LOCATION

Genetic locus: IGSF1 (human) mapping to Xq26.2; Igsf1 (mouse) mapping to X A5.

SOURCE

IGSF1 (F-7) is a mouse monoclonal antibody raised against amino acids 587-801 mapping within a C-terminal extracellular domain of IGSF1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IGSF1 (F-7) is available conjugated to agarose (sc-393786 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393786 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393786 PE), fluorescein (sc-393786 FITC), Alexa Fluor[®] 488 (sc-393786 AF488), Alexa Fluor[®] 546 (sc-393786 AF546), Alexa Fluor[®] 594 (sc-393786 AF594) or Alexa Fluor[®] 647 (sc-393786 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393786 AF680) or Alexa Fluor[®] 790 (sc-393786 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

IGSF1 (F-7) is recommended for detection of IGSF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IGSF1 siRNA (h): sc-91038, IGSF1 siRNA (m): sc-146185, IGSF1 shRNA Plasmid (h): sc-91038-SH, IGSF1 shRNA Plasmid (m): sc-146185-SH, IGSF1 shRNA (h) Lentiviral Particles: sc-91038-V and IGSF1 shRNA (m) Lentiviral Particles: sc-146185-V.

Molecular Weight of IGSF1: 150 kDa.

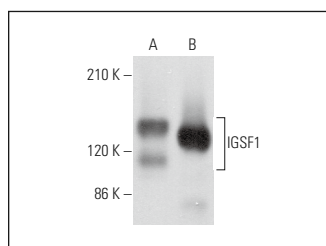
Positive Controls: Hep G2 nuclear extract: sc-364819 or human fetal liver tissue extract.

RECOMMENDED SUPPORT REAGENTS

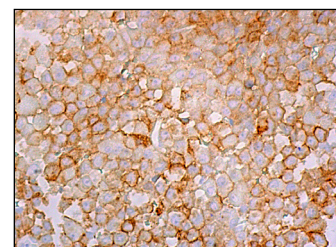
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



IGSF1 (F-7): sc-393786. Western blot analysis of IGSF1 expression in Hep G2 nuclear extract (A) and human fetal liver tissue extract (B).



IGSF1 (F-7): sc-393786. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pituitary gland tissue showing membrane staining of cells in anterior pituitary lobe. Blocked with 0.25X UltraCruz[®] Blocking Reagent: sc-516214. Detected with m-IgGκ BP-B: sc-516142 and ImmunoCruz[®] ABC Kit: sc-516216.

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.