

## ICA69 (D-14): sc-27535

### BACKGROUND

Pancreatic islet cells are clusters of endocrine cells that are scattered throughout the tissue of the pancreas and secrete Insulin and glucagon, which help the body store and use sugars. Each islet contains approximately 1,000 cells and is 50-500  $\mu$ m in diameter. Islet cell autoantigen 1, also designated ICA69 or p69 protein, is an environmental trigger molecule that induces diabetic autoimmunity to Insulin producing islet cells. The human ICA1 gene maps to chromosome 7p22 and generates three transcript variants that encode the T cell epitope (in exon 2) that is detectable by autoreactive T cells in diabetic children. Human ICA69 transcript is abundant in pancreas, brain and heart, with lower levels of expression found in lung, liver, thyroid and kidney.

### REFERENCES

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- Skinner, J.R., et al. 1992. Central venous pressure in the ventilated neonate. *Arch. Dis. Child.* 67: 374-377.
- Pietro Paolo, M., et al. 1993. Islet cell autoantigen 69 kD (ICA69). Molecular cloning and characterization of a novel diabetes-associated autoantigen. *J. Clin. Invest.* 92: 359-371.
- Hirano, K., et al. 1999. A case of non-functioning malignant islet cell tumor with egg-shaped calcification. *Nippon Shokakibyo Gakkai Zasshi* 96: 189-193.
- Hochwald, S.N., et al. 2001. Laparoscopy predicts metastatic disease and spares laparotomy in selected patients with pancreatic nonfunctioning islet cell tumors. *Ann. Surg. Oncol.* 8: 249-253.
- Kumagai, N., et al. 2002. Vascularized islet-cell transplantation in miniature swine. I. Preparation of vascularized islet kidneys. *Transplantation* 74: 1223-1230.

### CHROMOSOMAL LOCATION

Genetic locus: ICA1 (human) mapping to 7p21.3; Ica1 (mouse) mapping to 6 A1.

### SOURCE

ICA69 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ICA69 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-27535 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

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

### APPLICATIONS

ICA69 (D-14) is recommended for detection of ICA69 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for ICA69 siRNA (h): sc-72102, ICA69 siRNA (m): sc-106991, ICA69 shRNA Plasmid (h): sc-72102-SH, ICA69 shRNA Plasmid (m): sc-106991-SH, ICA69 shRNA (h) Lentiviral Particles: sc-72102-V and ICA69 shRNA (m) Lentiviral Particles: sc-106991-V.

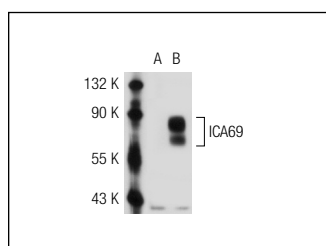
Molecular Weight of ICA69: 69 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285 or human pancreas extract: sc-363770.

### 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

### DATA



ICA69 (D-14): sc-27535. Western blot analysis of ICA69 expression in non-transfected: sc-117752 (A) and mouse ICA69 transfected: sc-120935 (B) 293T whole cell lysates.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **ICA69 (A-1): sc-271489** or **ICA69 (LIV3D3): sc-53362**, our highly recommended monoclonal alternatives to ICA69 (D-14).