

IGSF6 (H-5): sc-377053

BACKGROUND

Ig (immunoglobulin) superfamily members exhibit functional characteristics including immune responses, growth factor signaling and cell adhesion. IGSF6 (immunoglobulin superfamily, member 6), also known as DORA, is a novel 241 amino acid single-pass type I membrane protein that contains one Ig-like C2-type (immunoglobulin-like) domain. Expressed in spleen, dendritic cells, peripheral blood lymphocytes and lymph node, IGSF6 is induced by TNF α and GM-CSF in dendritic cells and downregulated by ionomycin and PMA in monocytes. IGSF6 may function as a coreceptor in the antigen uptake complex or dendritic cell recirculation and is encoded by a gene located on human chromosome 16p12.2, a locus associated with inflammatory bowel disease.

REFERENCES

1. Bates, E.E., et al. 1998. CD40L activation of dendritic cells down-regulates DORA, a novel member of the immunoglobulin superfamily. *Mol. Immunol.* 35: 513-524.
2. Lai, C.H., et al. 2000. Identification of novel human genes evolutionarily conserved in *Caenorhabditis elegans* by comparative proteomics. *Genome Res.* 10: 703-713.
3. Bates, E.E., et al. 2000. The mouse and human IGSF6 (DORA) genes map to the inflammatory bowel disease 1 locus and are embedded in an intron of a gene of unknown function. *Immunogenetics* 52: 112-120.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606222. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: IGSF6 (human) mapping to 16p12.2; Igsf6 (mouse) mapping to 7 F2.

SOURCE

IGSF6 (H-5) is a mouse monoclonal antibody raised against amino acids 28-153 mapping near the N-terminus of IGSF6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IGSF6 (H-5) is available conjugated to agarose (sc-377053 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377053 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377053 PE), fluorescein (sc-377053 FITC), Alexa Fluor® 488 (sc-377053 AF488), Alexa Fluor® 546 (sc-377053 AF546), Alexa Fluor® 594 (sc-377053 AF594) or Alexa Fluor® 647 (sc-377053 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377053 AF680) or Alexa Fluor® 790 (sc-377053 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

RESEARCH USE

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

APPLICATIONS

IGSF6 (H-5) is recommended for detection of IGSF6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 IGSF6 siRNA (h): sc-93333, IGSF6 siRNA (m): sc-146192, IGSF6 shRNA Plasmid (h): sc-93333-SH, IGSF6 shRNA Plasmid (m): sc-146192-SH, IGSF6 shRNA (h) Lentiviral Particles: sc-93333-V and IGSF6 shRNA (m) Lentiviral Particles: sc-146192-V.

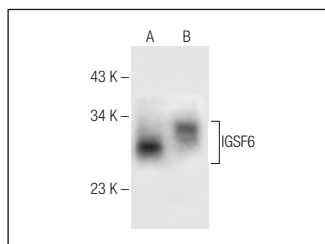
Molecular Weight of IGSF6: 27 kDa.

Positive Controls: human spleen extract: sc-363779 or human PBL whole cell lysate.

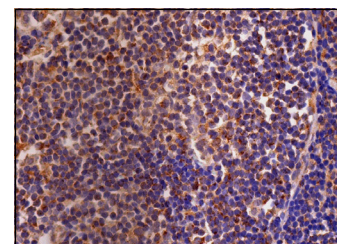
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



IGSF6 (H-5): sc-377053. Western blot analysis of IGSF6 expression in human spleen tissue extract (A) and human PBL whole cell lysate (B).



IGSF6 (H-5): sc-377053. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing cytoplasmic staining of cells in germinal centers and cells in non-germinal centers.

SELECT PRODUCT CITATIONS

1. Rong, Y.M., et al. 2023. IGSF6 is a novel biomarker to evaluate immune infiltration in mismatch repair-proficient colorectal cancer. *Sci. Rep.* 13: 20368.

STORAGE

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