

# IGSF6 (G-12): sc-164652

## 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 $\alpha$  and GM-CSF in dendritic cells and downregulated by ionomycin and PMA in monocytes. IGSF6 may function as a co-receptor 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

- Bates, E.E., Dieu, M.C., Ravel, O., Zurawski, S.M., Patel, S., Bridon, J.M., Ait-Yahia, S., Vega, F., Banchereau, J. and Lebecque, S. 1998. CD40L activation of Dendritic cells downregulates DORA, a novel member of the immunoglobulin superfamily. *Mol. Immunol.* 35: 513-524.
- Lai, C.H., Chou, C.Y., Ch'ang, L.Y., Liu, C.S. and Lin, W. 2000. Identification of novel human genes evolutionarily conserved in *Caenorhabditis elegans* by comparative proteomics. *Genome Res.* 10: 703-713.
- Bates, E.E., Kissenpfennig, A., Péronne, C., Mattei, M.G., Fossiez, F., Malissen, B. and Lebecque, S. 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.
- 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/>
- King, K., Moody, A., Fisher, S.A., Mirza, M.M., Cuthbert, A.P., Hampe, J., Sutherland-Craggs, A., Sanderson, J., MacPherson, A.J., Forbes, A., Mansfield, J., Schreiber, S., Lewis, C.M. and Mathew, C.G. 2003. Genetic variation in the IGSF6 gene and lack of association with inflammatory bowel disease. *Eur. J. Immunogenet.* 30: 187-190.
- Shu, K.X., Wu, L.X., Xie, Y.F., Zhao, J.F., Liang, Y.L. and Li, B. 2006. Characterization of the human PAP1 gene and its homologue possible involvement in mouse embryonic development. *Colloids Surf. B Biointerfaces* 52: 22-30.

## CHROMOSOMAL LOCATION

Genetic locus: Igsf6 (mouse) mapping to 7 F2.

## SOURCE

IGSF6 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of IGSF6 of mouse origin.

## STORAGE

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

## 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-164652 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

IGSF6 (G-12) is recommended for detection of IGSF6 of mouse and rat 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.

IGSF6 (G-12) is also recommended for detection of IGSF6 in additional species, including porcine.

Suitable for use as control antibody for IGSF6 siRNA (m): sc-146192, IGSF6 shRNA Plasmid (m): sc-146192-SH and IGSF6 shRNA (m) Lentiviral Particles: sc-146192-V.

Molecular Weight of IGSF6: 27 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.

## 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.



Try **IGSF6 (H-5): sc-377053**, our highly recommended monoclonal alternative to IGSF6 (G-12).