

KIR3DL1 (C-8): sc-514336

BACKGROUND

The killer immunoglobulin-like receptors (KIRs) on natural killer (NK) cells regulate the inhibition and activation of NK-cell responses through recognition of human leukocyte antigen (HLA) class I molecules. KIR3DL1, a receptor for HLA-B antigens with the Bw4 allele, transmits an inhibitory signal to prevent killer cell-mediated cytotoxicity. KIR3DL1 encodes a 444 amino acid type I transmembrane protein, containing 3 immunoglobulin-like C2-type domains. Human KIR3DL1 maps to chromosome 19q13.4.

REFERENCES

- Vyas, Y., Selvakumar, A., Steffens, U. and Dupont, B. 1998. Multiple transcripts of the killer cell immunoglobulin-like receptor family, KIR3DL1 (NKB1), are expressed by natural killer cells of a single individual. *Tissue Antigens* 6: 510-519.
- Wende, H., Colonna, M., Ziegler, A. and Volz, A. 1999. Organization of the leukocyte receptor cluster (LRC) on human chromosome 19q13.4. *Mamm. Genome* 10: 154-160.
- Kwon, D., Chwae, Y.J., Choi, I.H., Park, J.H., Kim, S.J. and Kim, J. 2000. Diversity of the p70 killer cell inhibitory receptor (KIR3DL) family members in a single individual. *Mol. Cells* 1: 54-60.
- Martin, M.P., Gao, X., Lee, J.H., Nelson, G.W., Detels, R., Goedert, J.J., Buchbinder, S., Hoots, K., Vlahov, D., Trowsdale, J., Wilson, M., O'Brien, S.J. and Carrington, M. 2002. Epistatic interaction between KIR3DS1 and HLA-B delays the progression to AIDS. *Nat. Genet.* 4: 429-434.
- López-Vázquez, A., Miña-Blanco, A., Martínez-Borra, J., Njobvu, P.D., Suárez-Alvarez, B., Blanco-Gelaz, M.A., González, S., Rodrigo, L. and López-Larrea, C. 2005. Interaction between KIR3DL1 and HLA-B*57 super-type alleles influences the progression of HIV-1 infection in a Zambian population. *Hum. Immunol.* 66: 285-289.
- Lopez-Larrea, C., Blanco-Gelaz, M.A., Torre-Alonso, J.C., Bruges Armas, J., Suarez-Alvarez, B., Pruneda, L., Couto, A.R., Gonzalez, S., Lopez-Vázquez, A. and Martinez-Borra, J. 2006. Contribution of KIR3DL1/3DS1 to ankylosing spondylitis in human leukocyte antigen-B27 Caucasian populations. *Arthritis Res. Ther.* 8: R101.

SOURCE

KIR3DL1 (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 20-45 within an extracellular domain of KIR3DL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514336 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

KIR3DL1 (C-8) is recommended for detection of a broad range of KIR family members of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

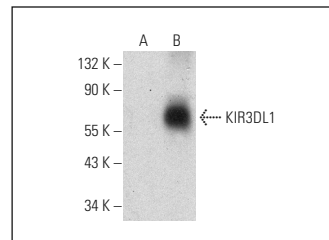
Molecular Weight of KIR3DL1: 50 kDa.

Positive Controls: KIR3DL1 (h): 293T Lysate: sc-114644.

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, 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 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.

DATA



KIR3DL1 (C-8): sc-514336. Western blot analysis of KIR3DL1 expression in non-transfected: sc-117752 (A) and human KIR3DL1 transfected: sc-114644 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.