

KIR3DL1 (B-8): sc-377220

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 three immunoglobulin-like C2-type domains. Human KIR3DL1 maps to chromosome 19q13.4.

REFERENCES

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- Wende, H., et al. 1999. Organization of the leukocyte receptor cluster (LRC) on human chromosome 19q13.4. *Mamm. Genome* 10: 154-160.
- Kwon, D., et al. 2000. Diversity of the p70 killer cell inhibitory receptor (KIR3DL) family members in a single individual. *Mol. Cells* 10: 54-60.
- Martin, M.P., et al. 2002. Epistatic interaction between KIR3DS1 and HLA-B delays the progression to AIDS. *Nat. Genet.* 31: 429-434.
- López-Vázquez, A., et al. 2005. Interaction between KIR3DL1 and HLA-B*57 supertype alleles influences the progression of HIV-1 infection in a Zambian population. *Hum. Immunol.* 66: 285-289.
- Lopez-Larrea, C., et al. 2006. Contribution of KIR3DL1/3DS1 to ankylosing spondylitis in human leukocyte antigen-B27 Caucasian populations. *Arthritis Res. Ther.* 8: R101.
- Thananchai, H., et al. 2007. Cutting edge: allele-specific and peptide-dependent interactions between KIR3DL1 and HLA-A and HLA-B. *J. Immunol.* 178: 33-37.

SOURCE

KIR3DL1 (B-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 401-437 within a cytoplasmic 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.

KIR3DL1 (B-8) is available conjugated to agarose (sc-377220 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377220 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377220 PE), fluorescein (sc-377220 FITC), Alexa Fluor® 488 (sc-377220 AF488), Alexa Fluor® 546 (sc-377220 AF546), Alexa Fluor® 594 (sc-377220 AF594) or Alexa Fluor® 647 (sc-377220 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377220 AF680) or Alexa Fluor® 790 (sc-377220 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377220 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

KIR3DL1 (B-8) is recommended for detection of KIR2DL1, KIR2DL2, KIR2DL3, KIR3DL1 and KIR3DL3 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).

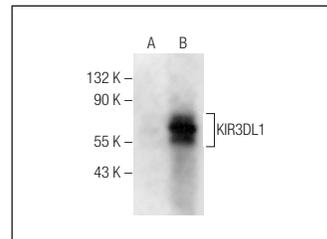
Molecular Weight of KIR3DL1: 50 kDa.

Positive Controls: KIR3DL1 (h): 293T Lysate: sc-114644 or human liver extract: sc-363766.

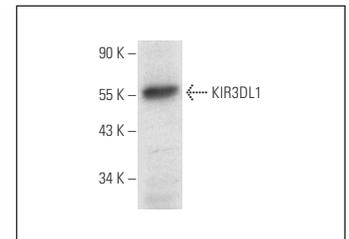
RECOMMENDED SUPPORT REAGENTS

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.

DATA



KIR3DL1 (B-8): sc-377220. Western blot analysis of KIR3DL1 expression in non-transfected: sc-117752 (A) and human KIR3DL1 transfected: sc-114644 (B) 293T whole cell lysates.



KIR3DL1 (B-8): sc-377220. Western blot analysis of KIR3DL1 expression in human liver tissue extract.

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.

PROTOCOLS

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

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