

# KIR3DL1/2 (C-3): sc-515229

## 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 and KIR3DL2 map to chromosome 19.

## REFERENCES

1. Vyas, Y., et al. 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.
2. Wende, H., et al. 1999. Organization of the leukocyte receptor cluster (LRC) on human chromosome 19q13.4. *Mamm. Genome* 10: 154-160.
3. Kwon, D., et al. 2000. Diversity of the p70 killer cell inhibitory receptor (KIR3DL) family members in a single individual. *Mol. Cells* 1: 54-60.
4. Martin, M.P., et al. 2002. Epistatic interaction between KIR3DS1 and HLA-B delays the progression to AIDS. *Nat. Genet.* 4: 429-434.
5. 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.
6. 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.
7. 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.

## CHROMOSOMAL LOCATION

Genetic locus: KIR3DL1/KIR3DL2 (human) mapping to 19q13.42;  
Kir3dl1/Kir3dl2 (mouse) mapping to X F1.

## SOURCE

KIR3DL1/2 (C-3) is a mouse monoclonal antibody raised against amino acids 271-317 mapping near the C-terminus of KIR3DL2 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KIR3DL1/2 (C-3) is available conjugated to agarose (sc-515229 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515229 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515229 PE), fluorescein (sc-515229 FITC), Alexa Fluor<sup>®</sup> 488 (sc-515229 AF488), Alexa Fluor<sup>®</sup> 546 (sc-515229 AF546), Alexa Fluor<sup>®</sup> 594 (sc-515229 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-515229 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-515229 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-515229 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

KIR3DL1/2 (C-3) is recommended for detection of KIR3DL1 and KIR3DL2 of mouse, rat and 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).

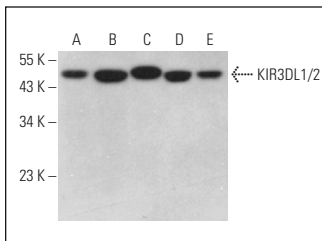
Molecular Weight of KIR3DL1/2: 50 kDa.

Positive Controls: EOC 20 whole cell lysate: sc-364187, RAW 264.7 whole cell lysate: sc-2211 or NIH/3T3 whole cell lysate: sc-2210.

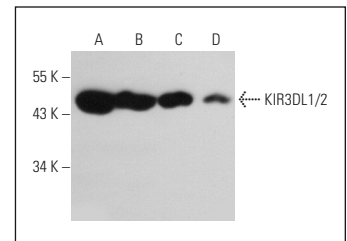
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



KIR3DL1/2 (C-3): sc-515229. Western blot analysis of KIR3DL1/2 expression in EOC 20 (A), CCRF-CEM (B), TK-1 (C), SUP-T1 (D) and Jurkat (E) whole cell lysates.



KIR3DL1/2 (C-3): sc-515229. Western blot analysis of KIR3DL1/2 expression in NIH/3T3 (A), KNRK (B), RAW 264.7 (C) and PC-12 (D) 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.

## 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) for detailed protocols and support products.

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