

# KIR3DL1/2 (G-4): sc-398824

## 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 and KIR3DL2 map to chromosome 19.

## 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.
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- 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.
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## CHROMOSOMAL LOCATION

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

## SOURCE

KIR3DL1/2 (G-4) is a mouse monoclonal antibody raised against amino acids 275-392 mapping near the C-terminus of KIR3DL1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

KIR3DL1/2 (G-4) 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).

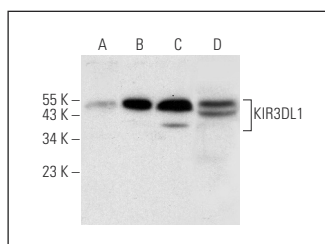
Molecular Weight of KIR3DL1/2: 50 kDa.

Positive Controls: KIR3DL1 (h): 293T Lysate: sc-114644, K-562 whole cell lysate: sc-2203 or human liver extract: sc-363766.

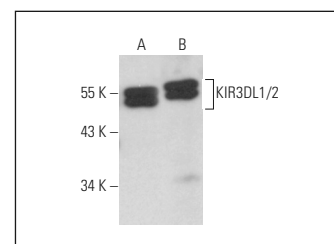
## RECOMMENDED SUPPORT REAGENTS

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



KIR3DL1/2 (G-4): sc-398824. Western blot analysis of KIR3DL1 expression in non-transfected 293T: sc-117752 (A), human KIR3DL1 transfected 293T: sc-114644 (B) and K-562 (C) whole cell lysates and human liver tissue extract (D).



KIR3DL1/2 (G-4): sc-398824. Western blot analysis of KIR3DL1/2 expression in EOC 20 whole cell lysate (A) and rat thymus tissue extract (B).

## 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.