SANTA CRUZ BIOTECHNOLOGY, INC.

KIR3DL3 (T-13): sc-50737



BACKGROUND

NKAT (NK-associated transcripts) gene products, known as killer immunoglobulin-like receptors or KIRs, downregulate the cytotoxicity of NK cells upon recognition of specific class I major histocompatibility complex (MHC) molecules on target cells. KIR3DL3, the most centromeric gene in the KIR gene cluster, maps to chromosome 19. The 410 amino acid KIR3DL3 (also designated KIRC1, KIR3DL7, KIR44 and CD158Z) protein has three Ig domains, an N-terminal signal sequence, a transmembrane region lacking a positively charged residue and a long cytoplasmic tail containing an immunoreceptor tyrosine-based inhibitory motif (ITIM), but lacks the stalk region found in other KIRs. KIR3DL3 exhibits low or undetectable levels of expression in peripheral blood NK cells. However, demethylation treatment readily induces KIR3DL3 expression in NK cells, indicating that low KIR3DL3 expression in peripheral blood is due to sustained DNA methylation of a functional promoter.

REFERENCES

- Torkar, M., et al. 1999. Isotypic variation of novel immunoglobulin-like transcript/killer cell inhibitory receptor loci in the leukocyte receptor complex. Eur. J. Immunol. 28: 3959-3967.
- Yawata, M., et al. 2003. Variation within the human killer cell immunoglobulin-like receptor (KIR) gene family. Crit. Rev. Immunol. 22: 463-482.

CHROMOSOMAL LOCATION

Genetic locus: KIR3DL3 (human) mapping to 19q13.42.

SOURCE

KIR3DL3 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of KIR3DL3 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50737 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIR3DL3 (T-13) is recommended for detection of KIR3DL3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for KIR3DL3 siRNA (h): sc-60892, KIR3DL3 shRNA Plasmid (h): sc-60892-SH and KIR3DL3 shRNA (h) Lentiviral Particles: sc-60892-V.

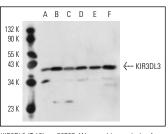
Molecular Weight of KIR3DL3: 45 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or HL-60 whole cell lysate: sc-2209.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



KIR3DL3 (T-13): sc-50737. Western blot analysis of KIR3DL3 expression in K-562 (A), Jurkat (B), HL-60 (C), MEG-01 (D), HEL 92.1.7 (E) and THP-1 (F) 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try KIR2DL3 (E-5): sc-398606 or KIR2DL3 (190IIC311): sc-59274, our highly recommended monoclonal alternatives to KIR3DL3 (T-13).