



# Mouse anti-Human KIR2DL4 monoclonal antibody, clone nBc44 [PE] (CABT-B10521)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|---------------------------|---|
| <b>Specificity</b>        | The mouse monoclonal antibody mAb44 recognizes extracellular portion of KIR2DL4 (CD158d), a 45 kDa NK cell marker. Cell surface expression and function of KIR2DL4 depends on genotype of particular individuals. |
| <b>Immunogen</b>          | NK3.3 cells and KIR2DL4-Ig fusion protein.  |
| <b>Isotype</b>            | IgG1  |
| <b>Source/Host</b>        | Mouse   |
| <b>Species Reactivity</b> | Human   |
| <b>Clone</b>              | nBc44   |
| <b>Conjugate</b>          | PE  |
| <b>Applications</b>       | FC  |
| <b>Format</b>             | Liquid  |
| <b>Buffer</b>             | In PBS, pH 7.4 (0.02% BSA, 15 mM sodium azide)  |
| <b>Storage</b>            | Store in the dark at 4°C. Avoid prolonged exposure to light. Do not freeze.   |

## BACKGROUND

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|---------------------|--|
| <b>Introduction</b> | Killer cell immunoglobulin-like receptors (KIRs) are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte |
|---------------------|--|

receptor complex (LRC). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins are classified by the number of extracellular immunoglobulin domains (2D or 3D) and by whether they have a long (L) or short (S) cytoplasmic domain. KIR proteins with the long cytoplasmic domain transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response. This gene is one of the "framework" loci that is present on all haplotypes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2008]

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**Keywords**

KIR2DL4; killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 4; G9P; CD158D; KIR103; KIR103AS; KIR-103AS; killer cell immunoglobulin-like receptor 2DL4; NK cell receptor; killer Ig receptor; CD158 antigen-like family member D; MHC class I NK cell receptor KIR103AS; killer cell inhibitory receptor 103AS; natural killer cell inhibitory receptor;

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## GENE INFORMATION

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**Entrez Gene ID**

[3805](#)

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**UniProt ID**

[Q99706](#)

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**Pathway**

Adaptive Immune System, organism-specific biosystem; Antigen processing and presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem; Immune System, organism-specific biosystem; Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell, organism-specific biosystem; Natural killer cell mediated cytotoxicity, organism-specific biosystem; Natural killer cell mediated cytotoxicity, conserved biosystem;

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**Function**

protein binding; receptor activity; transmembrane signaling receptor activity;

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