

## Product datasheet for RC213617

### KIR2DS3 (NM\_012313) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KIR2DS3 (NM_012313) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIR2DS3
Synonyms:	NKAT7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213617 representing NM_012313 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGCTCATGGTCATCAGCATGGCATGTGTTGGGTTCTTCTGGCTGCAGGGGGCCTGGCCACATGAGG  
GATTCGCGAGAAAACCTTCCCTCCTGGCCACCCAGGTCGCTGGTAAATCAGAAGAGACAGTCATCCT  
GCAATGTTGGTCAGATGTCATGTTTGGCACTTCTTCTGCACAGAGAGGGGACGTTTAAACGACACTTTG  
CGCCTCATTGGAGAGCACATTGATGGGGTCTCCAAGGCCAACTTCTCCATCGGTCGCATGAGGCAAGACC  
TGGCAGGGACCTACAGATGCTACGGTTCGTTCTCACTCCCCATCAGTTTTTCAGCTCCCAGTGACCC  
TCTGGACATCGTGATCACAGGTCTATATGAGAAACCTTCTCTCTCAGCCAGCCGGGCCACCGTTCTG  
GCAGGAGAGAGCGTGACCTTGTCTGCAGCTCCTGGAGCTCCTATGACATGTACCATCTATCCACGGAGG  
GGGAGGCCATGAACGTAGGTTCTTGCAGGGCCCAAGGTCAACGGAACATTCCAGGCCGACTTTCTCT  
GGGCCCTGCCACCCAAGGAGGAACCTACAGATGCTTCGGCTCTTCCATGACTCTCCCTACGAGTGGTCA  
AAGTCAAGTGACCCACTGCTTGTCTGTACAGGAAACCTTCAAAATAGTTGGCCTTCAACCACTGAAC  
CAAGCTCCAAAACCGTAACCCAGACACCTACACGTTCTGATTGGGACCTCAGTGGTCAAACCTCCCTT  
CACCATCTCTCTTCTTCTCCTTTCATCGCTGGTGCTCCGACAAAAAATGCATCTGTAATGGACCAA  
GGCCTCGGGGAACAGAACAGTGAACAGGGAGGATTCTGACGAACAGGACCATCAGGAGGTGCATACG  
CA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC213617 representing NM\_012313  
Red=Cloning site Green=Tags(s)

MSLMVISMACVGFVWLQGAWPHEGFRRKPSLLAHPGRLVKSEETVILQCWSDVMFEHFLHREGTFNDTL  
 RLIGEHIDGVSKANFSIGRMRQDLAGTYRCYGSVPHSPYQFSAPSDPLDIVITGLYEKPSLSAQPGPTVL  
 AGESVTLSCSSWSYDMYHLSTEGEAHERRF SAGPKVNGTFQADFPLGPATQGGTYRCFGSFHDSPLYEWS  
 KSSDPLLVSVTGNPNSWSPTEPSSKTGNPRHLHVLIGTSVVKLPFTILLFLLHRWCSDKKNASVMDQ  
 GPAGNRTVNREDSDEQDHQEVSYA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6288\\_e09.zip](https://cdn.origene.com/chromatograms/mk6288_e09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_012313

**ORF Size:** 912 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_012313.1](#), [NP\\_036445.1](#)

**RefSeq Size:** 1113 bp

**RefSeq ORF:** 915 bp

**Locus ID:** 3808

**UniProt ID:** [Q14952](#)

**Cytogenetics:** 19q13.4

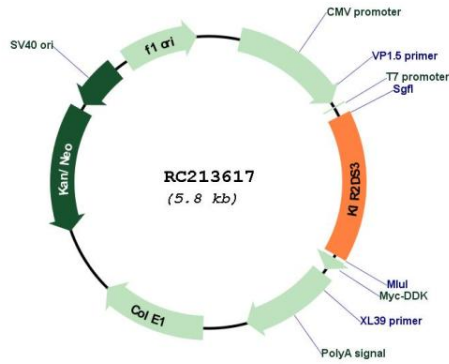
**Protein Families:** Transmembrane

**Protein Pathways:** Antigen processing and presentation, Natural killer cell mediated cytotoxicity

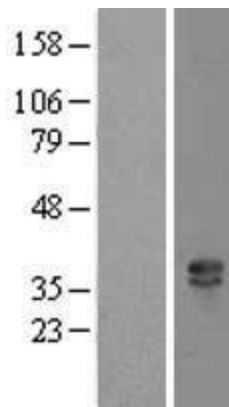
**MW:** 33.5 kDa

**Gene Summary:** 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. [provided by RefSeq, Jul 2008]

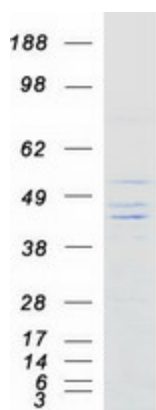
Product images:



Circular map for RC213617



Western blot validation of overexpression lysate (Cat# [LY415837]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213617 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KIR2DS3 protein (Cat# [TP313617]). The protein was produced from HEK293T cells transfected with KIR2DS3 cDNA clone (Cat# RC213617) using MegaTran 2.0 (Cat# [TT210002]).