

Product datasheet for RC211725

KIR2DS2 (NM_012312) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIR2DS2 (NM_012312) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIR2DS2
Synonyms:	183ActI; CD158b; CD158J; cl-49; KIR-2DS2; KIR2DL1; NKAT-5; NKAT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211725 representing NM_012312. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCGCTCACTGTCGTGAGCATGGCGTGTGTTGGGTTCTTCTTGCTGCAGGGGGCCTGGCCACATGAG
GGAGTCCACAGAAAACCTTCCCTCCTGGCCACCCAGGTCCCCTGGTAAAATCAGAAGAGACAGTCATC
CTGCAATGTTGGTCAGATGTCAGGTTTGGACACTTCTTCTGCACAGAGAGGGGAAGTATAAGGACACT
TTGCACCTCATTGGAGAGCACCATGATGGGGTCTCCAAGGCCAACTTCTCCATCGGTCCCATGATGCAA
GACCTTGCAGGGACCTACAGATGCTACGGTTCTGTTACTCACTCCCCTATCAGTTGTCAGCTCCCAGT
GACCCTCTGGACATCGTCATCACAGGTCTATATGAGAAACCTTCTCTCAGCCAGCCGGGCCCCACG
GTTTTGGCAGGAGAGAGCGGTGACCTTGTCTGCAGCTCCCGGAGCTCCTATGACATGTACCATCTATCC
AGGGAGGGGGAGGCCATGAACGTAGGTTCTCTGCAGGGCCCAAGGTCAACGGAACATTCAGGCCGAC
TTTCTCTGGGCCCTGCCACCCAGGAGAACCTACAGATGCTTCGGCTCTTCCGTGACTCTCCCTAT
GAGTGGTCAAACCTCGAGTGACCCACTGCTTGTCTGTACAGGAAACCTTCAAATAGTTGGCCTTCA
CCCCTGAACCAAGCTCCAAAACCGTAACCCAGACCTGCATGTTCTGATTGGGACCTCAGTGGTC
AAAATCCCTTTCACCATCCTCCTCTTCTTCTCCTTCATCGTGGTGCTCCAACAAAAAAATGCTGCT
GTAATGGACCAAGAGCCTGCAGGGAACAGAACAGTGAACAGCGAGGATTCTGATGAACAAGACCATCAG
GAGGTGCATACGCA
ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Protein Sequence: >Peptide sequence encoded by RC211725
 Blue=ORF Red=Cloning site Green=Tag(s)

MSLTVVSMACVGFLLQGAWPHEGVHRKPSLLAHPGPLVKSEETVILQCWSDVRFEFHLLHREGKYKDT
 LHLIGEHHDGVSKANFSIGPMMQDLAGTYRCYGSVTHSPYQLSAPSDPLDIVITGLYEKPSLSAQPGPT
 VLAGESVTLSCSSRSSYDMYHL SREGEAHERRF SAGPKVNGTFQADFPLGPATHGGTYRCFGSFRDSPY
 EWSNSSDPLLVSVTGNPSNSWSPTEPSSKTGNPRHLHVLIGTSVVKIPFTILLFLLHRWCSNKKNA
 VMDQEPAGNRTVNSEDSDEQDHQEVSYA
 TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Recombinant protein using RC211725 also available, [TP311725M](#)

Chromatograms: https://cdn.origene.com/chromatograms/mk6473_e06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_012312

ORF Size: 912 bp

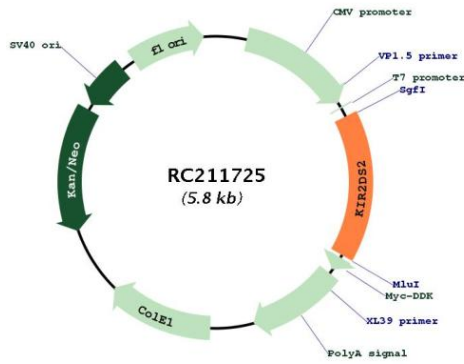
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

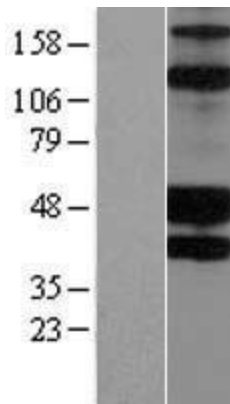
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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 Size:	1573 bp
RefSeq ORF:	915 bp
Locus ID:	100132285
UniProt ID:	P43631
Cytogenetics:	19q13.4
MW:	33.5 kDa
Gene Summary:	<p>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 represents a haplotype-specific family member that encodes a protein with a short cytoplasmic tail. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]</p>

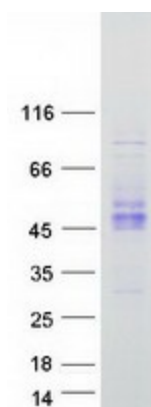
Product images:



Circular map for RC211725



Western blot validation of overexpression lysate (Cat# [LY415836]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211725 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KIR2DS2 protein (Cat# [TP311725]). The protein was produced from HEK293T cells transfected with KIR2DS2 cDNA clone (Cat# RC211725) using MegaTran 2.0 (Cat# [TT210002]).