

## Product datasheet for **RG214354**

### **KIR2DL4 (NM\_002255) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KIR2DL4 (NM\_002255) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** KIR2DL4  
**Synonyms:** CD158D; G9P; KIR-2DL4; KIR-103AS; KIR103; KIR103AS  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG214354 representing NM\_002255  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCATGTCACCCACGGTCATCATCCTGGCATGTCTTGGGTTCTTCTGGACCAGAGTGTGTGGGCAC  
 ACGTGGGTGGTCAGGACAAGCCCTTCTGCTCGCCTGGCCAGCGCTGTGGTGCCCAAGGAGGACACGT  
 GACTCTTCGGTGTCACTATCGTCGTGGGTTAACATCTTACGCTGTACAAGAAAGATGGGGTCCCTGTC  
 CCTGAGCTCTACAACAGAATATTCTGGAACAGTTTCTCATTAGCCCTGTGACCCAGCACACGCAGGGA  
 CCTACAGATGTCGAGTTTTACCCGCACTCCCCACTGAGTGGTCGGCACCCAGCAACCCCTGGTGAT  
 CATGGTCACAGGTCTATATGAGAAACCTTCGCTTACAGCCGGCCGGCCACCGTTTCGCACAGGAGAG  
 AACGTGACCTTGTCTGCAGCTCCAGAGCTCCTTTGACATCTACCATCTATCCAGGGAGGGGAAGCCC  
 ATGAACTTAGGCTCCCTGCAGTGCCAGCATCAATGGAACATTCAGGCCGACTTCCCTCTGGGTCTGTC  
 CACCCACGGAGAGACCTACAGATGCTTCGGCTCTTCCATGGATCTCCCTACGAGTGGTCAGACGCGAGT  
 GACCCACTGCCTGTTTCTGTACAGGAAACCTTCTAGTAGTTGGCTTCACCCACTGAACCAAGCTTCA  
 AAAGTGGTATCGCCAGACACCTGCATGCTGTGATTAGGTAAGTACTAGTGGCCATCATCTCTACCATCCT  
 TCCCTTCTTCTCCTTTCATCGCTGGTGTCCAAAAAAAAAATGCTGTGTAATGAACCAAGAGCCTGGC  
 GGACACAGAACAGTGAACAGGGAGGACTCTGATGAACAAGACCCCTCAGGAGGTGACATACGCACAGTTGG  
 ATCACTGCATTTTACACAGAGAAAAATCACTGGCCCTTCTCAGAGGAGCAAGAGACCCCTCAACAGATAC  
 CAGCGTGTGTATAGAACTTCAAATGCTGAGCCAGAGCGTTATCTCCTGCCATGAGCACCACAGTCAG  
 GCCTTGATGGGATCTTCTAGGGAGACAACAGCCCTGTCTCAAACCCAGCTTGCCAGCTCTAATGTACCAG  
 CAGCTGGAATC

**ACGGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >RG214354 representing NM\_002255  
 Red=Cloning site Green=Tags(s)

MSMSPTVIILACLGFLLDQSVWAHVGGQDKPFCSAWPSAVVPQGGHVTLRCHYRRGFNIFTLYKKDGVVP  
 PELYNRIFWNSFLISPVTPAHAGTYRCRGFHPSPTTEWSAPSNPLVIMVTGLYEKPSLTARPGPTVRTGE  
 NVTLSCSSQSSFDIYHL SREGEAHELRLPAVPSINGTFQADFP LPATHGETYRCFGSFHGPSYEWSDAS  
 DPLPVSVTGNPSSSWPSPTEPSFKTGIARHLHAVIRYSVAIILFTILPFFLLHRWCSKKKNAAVMNQEP  
 A GHRTVNRREDSDEQDPQEVTYAQLDHCIF TQRKITGPSQRKRPSTDT SVCIELPNAEPRALSPAHEHHSQ  
 ALMGSSRETTALSQTQLASSNVPAAGI

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002255

**ORF Size:** 1131 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\\_002255.3](#), [NP\\_002246.3](#)

**RefSeq Size:** 1609 bp

**RefSeq ORF:** 1134 bp

**Locus ID:** 3805

**UniProt ID:** [Q99706](#)

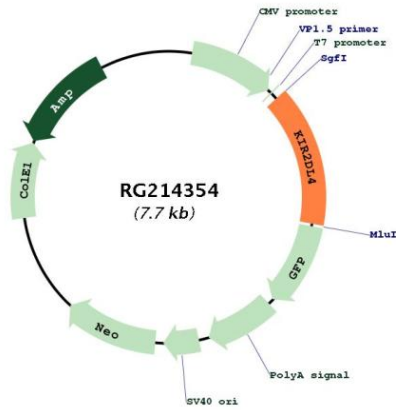
**Cytogenetics:** 19q13.42

**Protein Families:** Transmembrane

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

**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. This gene is one of the "framework" loci that is present on all haplotypes. Alternate alleles of this gene are represented on multiple alternate reference loci (ALT\_REF\_LOCs). Alternative splicing results in multiple transcript variants, some of which may not be annotated on the primary reference assembly. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RG214354