

Product datasheet for **MC204602**

Klrk1 (NM_033078) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klrk1 (NM_033078) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Klrk1
Synonyms:	D6H12S2489E; NKG2-D; Nkg2d
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC057147
 AAATAACAAAACTACAACCTGGATCAGTTTCTGAAGTAAATCTCTCATAATTCTCACATAATGGCATTG
 ATTCGTGATCGAAAGTCTCATCACTCAGAGATGAGCAAATGCCATAATTACGACCTCAAGCCAGCAAAGT
 GGGATACTTCTCAAGAACAACAGAAACAAAGATTAGCACTAACTACCAGTCAACCTGGAGAAAATGGTAT
 CATAAGAGGAAGATACCCTATAGAAAACTCAAATATCTCCAATGTTGTTGTTGCGAGTCTTGCATATA
 GCCTTGGCAATTTCGATTCACCTTAACACATTGATGTGGCTTGCATTTTCAAAGAGACGTTTCAGCCAG
 TATTGTGCAACAAGGAAGTCCCAGTTTCTCAAGAGAGGGCTACTGTGGCCCATGCCCTAACAACTGGAT
 ATGTACACAGAAACAAGTGTACCAATTTTTTAATGAAGAGAAAACCTGGAACCAAGCAAGCTTCCTGT
 TTGTCTCAAAATTCCAGCCTTCTGAAGATATACAGTAAAGAAACAGGATTTCTTAAAGCTGGTTAAGT
 CCTATCACTGGATGGGACTGGTCCAGATCCCAGCAAATGGCTCCTGGCAGTGGGAAGATGGCTCCTCTCT
 CTCATAAATCAGTTAACTCTGGTGAAAATACCAAAGGATCCTGTGCTGTCTATGGCTCAAGCTTAAAG
 GCTTACACAGAAGACTGTGCAAACTAAACACGTACATCTGCATGAAAAGGGCGGTGAAAACTTTCAT
 TACCCATCTCAGCAACAACCAGAACAAGAGAATTGTCTCGGGAGAAATGGGACTAAGAAGAAGAGACTG
 GGCATAAGACAAAAGCAAACAGCAGGTCTGCACCCTCCACCAAATGATTAGCTAAACACATTGTGTTC
 CATAAAAACAGGGAAGCCTGTGGGGCCAAGGAACCATGAGACAGGGGAAGAGGGAACAGGAGGACCAAGA
 GTGTGGTTGAAGCCTATCCAACTAGGGAAATATGGTCTGCCCTACTGGAGGAGGTGGTGTGCCCACT
 AGACTCTCAGCACCTTGATTTCCCTCCAGATATCCCTACTCACTCTCTAAAGGTTTAAATTAATATGA
 TATTTTATTCAAGATGCCTCTAGAGAGTCTAGACTCTATTTTGTAGTGGTCACCGAGGCCTGAGGTCTT
 TTCCTCCTGGCAGTTCTTGCCTCACTTCCCCTCTCAGGGTCTGTCTATTGTGATCATTGGTTGATCATGC
 TGCTTCTAGGATATGGGAAGAAGACGAGGAGGAGCTTCCATTTCAAGATGGAATCAAACAGAGGAACT
 GTGAGAAGTGGAGAATAAAACCCTATAGCTCACTGGGAGCTTAATCTCCAGCACTATGGAAAAGTGGT
 CTGGGTATAGCCACAGCAGGGACCACAGGGAGTGTGTGCTGGCAGTGTGCCATCTCAGTCACTCAAG
 AAAGCAGCCTGCTGTCTGGGAGGGACAGCAGAGACTCTGAGAAAAGTCAAGCAGGACTGCTTTTGGAA
 CTTGACAATCTCATGGAACCTCACTTTGTTGATTTTGTGCTTTCTTGGGATTCTCCCACTTTTCATATG
 CTTTCCACTTGAGATGACAGTGTCTGTTGAAAGCAAGGCACTATATTTGAAAGTATATAGCTTGTTCAC
 TTTACAAGTCAGAAAGTGGTGTGGAAGGAGTTGTCAGCTCTGTGGTGTAGGGTAGAATGGATACAG
 TTTGCAAGTGAGGAGATGGACTCCTGGAGCCATGGGTATAAGTTATACACCAAATGATTTTGTATTTTGT
 ACCTCCACGTTTCATATTTAAATTTCAAACCTCCAGGTATTAATATGAGGAGACAGGCACTGGATCATAAT
 GTTTTAAATCATAAGGATAAAGGCTTTGTAAGTGGGATACAAGAAATGGAGTTAGTTTTGCCTCTTAAG
 AATGCACCCAGGCGGGCTGGTGTGAGATGGCTCAGTGGTAAGGGCACCCGACTGCTTCCGAAGGTCTT
 AAGTTCAAATCCCAGCAACCACATGGTGGCTCACAAACCCTGTAATGAGATCTGATGCCCCCTTCTGGT
 GTATCTGAAGACAACACTACAGTGTACTTACATATAATAAATAAATAAATCTTTAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_033078

Insert Size: 699 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: [BC057147](#), [AAH57147](#)

RefSeq Size: 2170 bp

RefSeq ORF: 699 bp

Locus ID: 27007

UniProt ID: [O54709](#)

Cytogenetics: 6 63.44 cM

Gene Summary: Function as an activating and costimulatory receptor involved in immunosurveillance upon binding to various cellular stress-inducible ligands displayed at the surface of autologous tumor cells and virus-infected cells. Provides both stimulatory and costimulatory innate immune responses on activated killer (NK) cells, leading to cytotoxic activity. Acts as a costimulatory receptor for T-cell receptor (TCR) in CD8(+) T-cell-mediated adaptive immune responses by amplifying T-cell activation. Stimulates perforin-mediated elimination of ligand-expressing tumor cells. Signaling involves calcium influx, culminating in the expression of TNF-alpha. Participates in NK cell-mediated bone marrow graft rejection. May play a regulatory role in differentiation and survival of NK cells. Binds to ligands belonging to various subfamilies of MHC class I-related glycoproteins including RAET1A, RAET1B, RAET1C, RAET1D, RAET1E, H60 and MULT1.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript from the same strain was available for the full length of the gene. The extent of this transcript is supported by mRNA and EST alignments.