

Product datasheet for **MR222379**

Kirrel3 (NM_026324) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kirrel3 (NM_026324) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kirrel3
Synonyms:	1500010O20Rik; 2900036G11Rik; mKIAA1867; NEPH2; SST4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR222379 representing NM_026324
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAGACCTTTCCAGCTGGATTTGCTCTTCTCTGCTTCTTCTCAGTCAAGAGCTTGGCCTCCAGA
AGAGAGGATGCTGTCTGGTACTGGGCTACATGGCCAAGGACAAGTTTCGGAGAATGAATGAAGGTCAAGT
CTACTCCTTCAGCCAGCAACCCAGGACCAAGTGGTGGTGTGAGGACAGCCAGTACTCTGCTGTGTGCC
ATCCCTGAATATGATGGCTTCGTCCTGTGGATCAAAGATGGCTTGGCTCTGGGTGTAGGCAGAGACCTCT
CAAGTTACCCCAAGTACCTGGTGGTGGGAACACCTCTCAGGAGAGCATCACCTGAAGATCCTGAGGGC
TGAGTTCAGGATGATGCCGTGTATGAGTGCCAGGCCATCCAGGCTGCCATCCGGTCCCGCCCTGCACGC
CTCACCGTCTGGTGCCACCAGATGACCCCATCATCTAGGGGGGCTGTGATCAGCCTTCGGGCAGGGG
ACCCCTCAACCTCACCTGCCACGCAGACAATGCCAAGCCTGCGGCTTCATCATCTGGTACGTAAAGG
AGAGGTCAATGAGGCCACCTACTCCAAGACCTGCTTCGAGACGGCAAACGAGAAAGCATTGTCAGC
ACCTCTTCATCTCCCCAGGAGAGCTGGAAAATGGACAGAGTATTGTGTGCCGAGCCACCAACAAAGCCA
TCCCCGGAGGAAAAGAGACCTCTGTCCACATAGACATCCAGCATCCACCGCTTGTCAACTTGTCCGTGGA
ACCACAGCCGGTATTGGAGGACAACATCGTCACGTTCCACTGCTCTGCAAAGGCCAACCCAGCTGTCAAC
CAGTACAGGTGGGCCAAACGGGGTACATCATCAAGGAGGCATCTGGGGAGCTGTATAGGACCACGGTGG
ACTACACATACTCTCAGAGCCTGTATCCTGTGAAGTAACCAATGCCCTGGGCAGCACCAACCTCAGCCG
CACAGTGGATGTATACTTCGGTCTCGAATGACCTCAGAGCCTCAGTCACTGCTGGTAGACTGGGCTCC
GATGCTGTCTCAGCTGTGCGTGGATCGGCAACCCGTCTCTGACCATCGTGTGGATGAAACGAGGTTCTG
GTGGTCTCAGCAATGAAAAGACCTAACCTCAAATCTGTCCGCAAGAGGATGCTGGGAAGTACGT
GTGCCGGCTGTGGTCCCCGGGTAGGAGCTGGGGAGAGAGAGGTTGACCTTGACTGTCAATGGACCCCCC
ATCATCTCCAGCACAGACCCAGCAGCCCTCCACGGAGAGAAGGGCCAGATCAATGTTTCATCCGGA
GCACACCACCGCTGACCGAATTGCCTGGTCTGGAAGGAGAATGTGCTGGAGTCAGGGACATCAGGGCG
CTACACAGTGGAGACGGTGAACACGGAGGAGGAGTCACTCCACATTGACCATTAGCAACATTGTGCGT
GCTGACTTCCAGACCATATACAACGTACAGCCTGGAACAGCTTTGGCTCTGACACAGAGATCATCCGAC
TCAAGGAACAAGAGTCTGTACCAATGGCCGTATCATCGGGTGGCCGTAGGAGCTGGCGTGGCCTTCT
CGTCTAATGGCAACCATTGTGGCCTTCTGCTGTGCCGTTCCAGAGAAAATCTCAAAGGTGTTGTATCA
GCCAAAATGATATTCGAGTGGAAATGTGCACAAGGAGCCATCTCTGGCCGGGAGGCTGAGGACCACA
CCACCATAAAGCAGCTGATGATGGACCGGGTGAATCCAACAAGACTCGGTGCTGAAACAGCTGGAGGT
CCTCAAAGAAGAGGAGAAGGAGTTTCAGAACCTGAAGGACCCCAACAACGGCTACTACAGCGTCAACACC
TTCAAAGAACACCATTCAACTCCAACCATCTCCCTGTCCAGCTGCCAGCCAGACCTGCGTCCGACAGGCA
AACAGCGTGTGCCACAGGCATGTCTTACCAACATCTACAGCACCTTGAGCGGCCAGGGCCGCTCTA
CGACTATGGACAGAGGTTTGTGCTGGGCATGGGCAGCTTCCATTGAGCTTTGTGAGCGGGAGTTTCAG
AGGGGCTCCCTCAGCGACAGCAGCTCTTCTGGACACGCAGTGTGACAGCAGCGTCAGCAGCAGCGGCA
AGCAAGATGGCTACGTGCAGTTTGACAAGGCCAGCAAGGCTTCTGCCTCTTCCCACATTCCCAGTC
CTCTTCCAGAACTCCGACCCAGCCACCCCTGCAGCGGGATGCAGACTCACGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222379 representing NM_026324
Red=Cloning site Green=Tags(s)

MRPFQLDLLFLCFFLFSQELGLQKRGCCVLGYMAKDKFRMNEGQVYSFSQQPQDQVVVSGQPVTLLCA
 IPEYDGFVLWIKDGLALGVGRDLSSYPQYL VVGNHLSGEHHLKILRAELQDDAVYECQAIQAAIRSRPAR
 LTVLVPPDDPIILGGPVISLRAGDPLNL TCHADNAKPAASIIWLKKEVINGATYSKTLRLDGKRESIVS
 TLFISPQDVENGQSIVCRATNKAIPGGKETSVTIDIQHPPLVNLVSEVPQVLEDNIVTFHCSAKANPAVT
 QYRWAKRGHIIKEASGELYRRTTVDYTYFSEPVSCVETNALGSTNLSRTVDVYFGPRMTSEPOQLLVDLGS
 DAVFSCAWIGNPSLTIWVMKRGSGVVL SNEKTLTLKSVRQEDAGKYVCRAVVPVGVGAGERVTLTVNGPP
 IISSTQTQHALHGEKGQIKCFIRSTPPPDRIAWSKENVLESGTSGRYTVETVNTTEEGVISTLTISNIVR
 ADFQTIYNCTAWNSFGSDTEIIRLKEQESVPMAVIIGVAVGAGVAFVLMATIVAFCCARSQRNLKGVVS
 AKNDIRVEIVHKEPSSGREADHTTIKQLMMDRGEFQQDSVLKQLEVLKEEKEFQNLKDPNTNGYYSVNT
 FKEHHSTPTISLSSCQDLRPTGKQRVPTGMSFTNIYSTLSGQGRLYDYGQRFVLGMGSSSIELCEREFQ
 RGLSDSSSFLDTQCDSVSSSGKQDGYVQFDKASKASASSSHHSQSSSQNSDPSRPLQRRMQTHV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9004_c01.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_026324

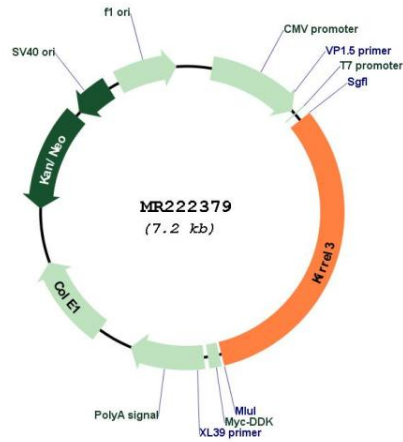
ORF Size: 2298 bp

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:	<u>NM_026324.3</u> , <u>NP_080600.1</u>
RefSeq Size:	3701 bp
RefSeq ORF:	2301 bp
Locus ID:	67703
UniProt ID:	<u>Q8BR86</u>
Cytogenetics:	9 A4
MW:	84.7 kDa
Gene Summary:	Synaptic adhesion molecule required for the formation of target-specific synapses (PubMed:23637329, PubMed:26575286). Required for formation of target-specific synapses at hippocampal mossy fiber synapses. Required for formation of mossy fiber filopodia, the synaptic structures connecting dentate granule and GABA neurons. Probably acts as a homophilic adhesion molecule that promotes trans-cellular interactions and stabilize mossy fiber filopodia contact and subsequent synapse formation (PubMed:26575286). Required for the coalescence of vomeronasal sensory neuron axons (PubMed:23637329). May be involved in the hematopoietic supportive capacity of stroma cells; the secreted extracellular domain is directly responsible for supporting hematopoietic stem cells (PubMed:12665856). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222379