OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR222381

Kirrel3 (NM_001190914) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kirrel3 (NM_001190914) 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:

>MR222381 representing NM_001190914
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAAGGACAAGTTTCGGAGAATGAATGAAGGTCAAGTCTACTCCTTCAGCCAGCAACCCCAGGACC
AAGTGGTGGTGTCAGGACAGCCAGTGACTCTGCTGTGTGCCATCCCTGAATATGATGGCTTCGTCCTGTG
GATCAAAGATGGCTTGGCTCTGGGTGTAGGCAGAGACCTCTCAAGTTACCCCCAGTACCTGGTGGTGGGG
AACCACCTCTCAGGAGAGCATCACCTGAAGATCCTGAGGGCTGAGCTTCAGGATGATGCCGTGTATGAGT
GCCAGGCCATCCAGGCTGCCATCCGGTCCCGCCCTGCACGCCTCACCGTCCTGGTGCCACCAGATGACCC
CATCATCCTAGGGGGGCCTGTGATCAGCCTTCGGGCAGGGGACCCCCTCAACCTCACCTGCCACGCAGAC
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TCACGTTCCACTGCTCTGCAAAGGCCAACCCAGCTGTCACCCAGTACAGGTGGGCCAAACGGGGTCACAT
CATCAAGGAGGCATCTGGGGAGCTGTATAGGACCACGGTGGACTACACATACTTCTCAGAGCCTGTATCC
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ACCCTCAAATCTGTCCGCCAAGAGGATGCTGGGAAGTACGTGTGCCGGGCTGTGGTGCCCCGGGTAGGAG
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CCTCCACGGAGAGAAGGGCCAGATCAAATGCTTCATCCGGAGCACACCACCGCCTGACCGAATTGCCTGG
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ACCAACATCTACAGCACCTTGAGCGGCCAGGGCCGCCTCTACGACTATGGACAGAGGTTTGTGCTGGGCA
TGGGCAGCTCTTCCATTGAGCTTTGTGAGCGGGAGTTTCAGAGGGGCTCCCTCAGCGACAGCAGCTCCTT
CCTGGACACGCAGTGTGACAGCAGCGTCAGCAGCAGCGGCAAGCAAGATGGCTACGTGCAGTTTGACAAG
GCCAGCAAGGCTTCTGCCTCCTCTTCCCACCATTCCCAGTCCTCTTCCCAGAACTCCGACCCCAGCCGAC
CCCTGCAGCGGCGGATGCAGACTCACGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222381 representing NM_001190914
Red=Cloning site Green=Tags(s)

MAKDKFRRMNEGQVYSFSQQPQDQVVVSGQPVTLLCAIPEYDGFVLWIKDGLALGVGRDLSSYPQYLVVG
NHLSGEHHLKILRAELQDDAVYECQAIQAAIRSRPARLTVLVPPDDPIILGGPVISLRAGDPLNLTCHAD
NAKPAASIIWLRKGEVINGATYSKTLLRDGKRESIVSTLFISPGDVENGQSIVCRATNKAIPGGKETSVT
IDIQHPPLVNLSVEPQPVLEDNIVTFHCSAKANPAVTQYRWAKRGHIIKEASGELYRTTVDYTYFSEPVS
CEVTNALGSTNLSRTVDVYFGPRMTSEPQSLLVDLGSDAVFSCAWIGNPSLTIVWMKRGSGVVLSNEKTL
TLKSVRQEDAGKYVCRAVVPRVGAGEREVTLTVNGPPIISSTQTQHALHGEKGQIKCFIRSTPPPDRIAW
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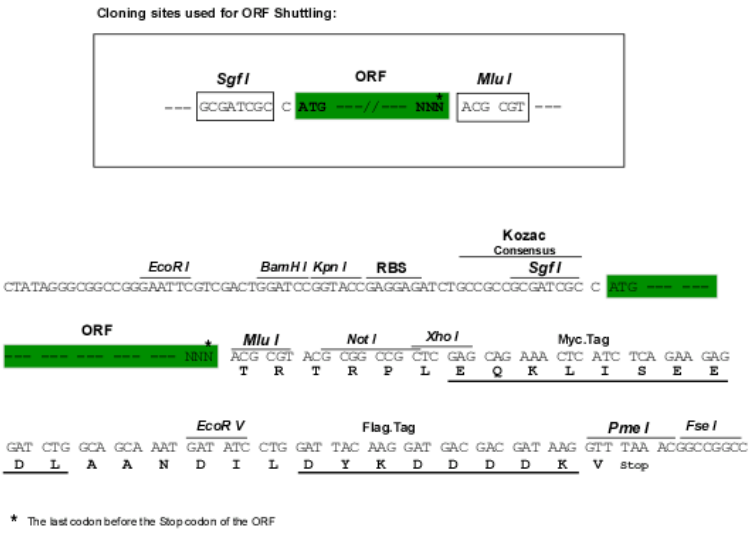
VIIGVAVGAGVAFLVLMATIVAFCCARSQRNLKGVVSAKNDIRVEIVHKEPSSGREAEDHTTIKQLMMDR
GEFQQDSVLKQLEVLKEEEKEFQNLKDPTNGYYSVNTFKEHHSTPTISLSSCQPDLRPTGKQRVPTGMSF
TNIYSTLSGQGRLYDYGQRFVLGMGSSSIELCEREFQRGSLSDSSSFLDTQCDSSVSSSGKQDGYVQFDK
ASKASASSSHHSQSSSQNSDPSRPLQRRMQTHV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001190914

ORF Size: 2199 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_001190914.1, NP_001177843.1

RefSeq Size: 3802 bp

RefSeq ORF: 2202 bp

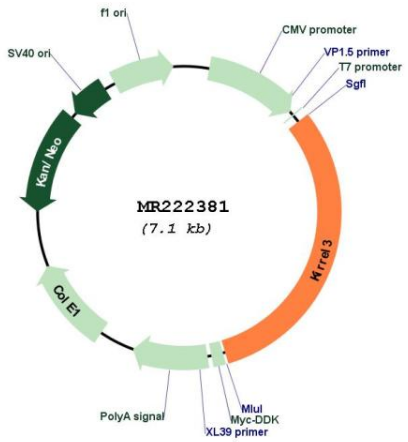
Locus ID: 67703

Cytogenetics: 9 A4

MW: 80.9 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 filipodia 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 MR222381