

## Product datasheet for **MC221172**

### **Kirrel3 (NM\_001190914) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kirrel3 (NM_001190914) Mouse Untagged Clone
Tag:	Tag Free
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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**Fully Sequenced ORF:** >MC221172 representing NM\_001190914  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCAAGGACAAGTTTCGGAGAATGAATGAAGTCAAGTCTACTCCTCAGCCAGCAACCCAGGACC  
 AAGTGGTGGTGTGACGACAGCCAGTACTGCTGTGTGCCATCCCTGAATATGATGGCTTCGTCCTGTG  
 GATCAAAGATGGCTTGGCTCTGGGTGTAGGCAGAGACCTCTCAAGTTACCCCAAGTACCTGGTGGTGGG  
 AACCACTCTCAGGAGAGCATCACCTGAAGATCCTGAGGGCTGAGCTTCAGGATGATGCCGTGTATGAGT  
 GCCAGGCCATCCAGGCTGCCATCCGGTCCCGCCCTGCACGCCCTACCGTCTGGTCCACCAGATGACCC  
 CATCATCTAGGGGGGCTGTGATCAGCCTTCGGGCAGGGGACCCCTCAACCTCACCTGCCACGCAGAC  
 AATGCCAAGCCTGCGCTTCCATCATCTGGCTACGTAAGGAGAGGTATCAATGGAGCCACCTACTCCA  
 AGACCTGCTTCGAGACGCCAAACGAGAAAGCATTGTGACACCCTTTCATCTCCCAGGAGACGTGGA  
 AAATGGACAGAGTATTGTGTGCCAGCCACCAACAAAGCCATCCCGGAGAAAAGAGACCTCTGTACC  
 ATAGACATCCAGCATCCACCGCTTGTCAACTTGTCCGTGGAACACAGCCGGTATTGGAGGACAACATCG  
 TCACGTTCCACTGCTCTGCAAAGGCCAACCCAGCTGTACCCAGTACAGGTGGGCAAACGGGGTACAT  
 CATCAAGGAGGCATCTGGGGAGCTGTATAGGACCACGGTGGACTACACATACTTCTCAGAGCCTGTATCC  
 TGTGAAGTAACCAATGCCTGGGCAGCACCAACCTCAGCCGCACAGTGGATGTATACTTCGGTCTCGAA  
 TGACCTCAGAGCCTCAGTCACTGCTGGTATGATCTGGGCTCCGATGCTGTCTTCAGCTGTGCGTGGATCGG  
 CAACCCGTCTCTGACCATCGTGTGGATGAAACGAGGTTCTGGTGTGGTCTGAGCAATGAAAAGACCCTA  
 ACCCTCAAATCTGTCCGCAAGAGGATGCTGGGAAGTACGTGTGCCGGCTGTGGTGCCCGGGTAGGAG  
 CTGGGGAGAGAGAGGTGACCTTGACTGTCAATGGACCCCATCATCTCCAGCACACAGCCAGCACGC  
 CCTCCACGGAGAGAAGGGCCAGATCAAATGCTTCATCCGGAGCACACCACCGCCTGACCGAATTGCCTGG  
 TCTGGAAGGAGAATGTGCTGGAGTCAGGGACATCAGGGCGCTACACAGTGGAGACGGTGAACACGGAGG  
 AGGGAGTCATCTCCACATTGACCATTAGCAACATTGTGCGTGTGACTTCCAGACCATATAACAAGTGTAC  
 AGCCTGGAACAGCTTTGGCTCTGACACAGAGATCATCCGACTCAAGGAACAAGAGTCTGTACCAATGGCC  
 GTCATCATCGGGTGGCCGTAGGAGCTGGCGTGGCCTTCTCGTCTAATGGCAACCATTGTGCCCTTCT  
 GCTGTGCCGTTCCAGAGAAATCTCAAAGGTGTTGTATCAGCAAAAAATGATATTCGAGTGAAATTGT  
 GCACAAGGAGCCATCTTCTGGCCGGGAGGCTGAGGACCACACCACATAAAGCAGCTGATGATGGACCGG  
 GGTGAATTCACAAGACTCGGTGCTGAAACAGCTGGAGTCTCAAAGAAGAGGAGAAGGAGTTTCAGA  
 ACCTGAAGGACCCACCAACGGCTACTACAGCGTCAACACCTTCAAAGAACCATTCAACTCCAACCAT  
 CTCCCTGTCCAGCTGCCAGCCAGACCTGCGTCCGACAGGCAAACAGCGTGTGCCACAGGATGTCTTTC  
 ACCAACATCTACAGCACCTTGAGCGGCCAGGGCCCTCTACGACTATGGACAGAGGTTTGTGCTGGGCA  
 TGGGCAGCTCTTCCATTGAGCTTTGTGAGCGGGAGTTTCAGAGGGGCTCCCTCAGCGACAGCAGCTCCTT  
 CCTGGACACGCAGTGTGACAGCAGCGTCAGCAGCAGCGGCAAGCAAGATGGCTACGTGCAGTTTGACAAG  
 GCCAGCAAGGCTTCTGCCTCCTTCCCACCATTCCCAGTCTCTCCCAGAACTCCGACCCAGCCGAC  
 CCCTGCAGCGGGATGCAGACTCAGCT**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001190914

**Insert Size:** 2202 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).

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001190914.1, NP_001177843.1</u>
<b>RefSeq Size:</b>	3802 bp
<b>RefSeq ORF:</b>	2202 bp
<b>Locus ID:</b>	67703
<b>Cytogenetics:</b>	9 A4
<b>Gene Summary:</b>	<p>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).</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (E) contains an alternate exon in the 5' coding region, uses a downstream start codon and lacks an in-frame exon in the 3' coding region, compared to variant A. The resulting protein (isoform E) has a shorter N-terminus than isoform A.</p>