

Product datasheet for **RC219548**

KIRREL1 (NM_018240) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIRREL1 (NM_018240) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIRREL1
Synonyms:	KIRREL; NEPH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC219548 representing NM_018240
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGAGCCTCCTCGTCTGGATCCTCACTCTCTCCGATACTTTCTCCCAAGGGACCCAGACCCGCTTCA
 GCCAGGAGCCAGCTGACCAGACGGTGGTGGCTGGACAGCGGGCCGTGCTCCCCTGTGTGCTGCTCAACTA
 CTCTGGAATTGTGCAATGGACCAAGGACGGCTGGCCCTGGGCATGGGCCAGGGCCTCAAAGCCTGGCCA
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ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219548 representing NM_018240
Red=Cloning site Green=Tags(s)

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MLSLLVWILTLSDTFSQGTQTRFSQEPADQTVVAGQRAVLPCVLLNYSIGIVQWTKDGLALGMGQGLKAWP
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LTCRAFNAKPAATIIWFRDGTQQEGAVASTELLKDGKRETTVSQLLINPTDLDIGRVFTCRMNEAIPSG
KETSIELDVHHPPTVTLSEIPEQTVQEGERVVFTCQATANPEILGYRWAKGGFLIEDAHESRYETNVDYSF
FTEPVSCVHNKVGSTNVSTLVNVHFAPRIVVDPKPTTTDIGSDVTLTCVWVGNPPLTLTWTKDSNMVL
SNSNQLLLKSVTQADAGTYTCRAIVPRIGVAEREVPLYVNGPPIISSEAVQYAVRGDGGKVECFIGSTPP
PDRIAWAWKENFLEVGLTERYTVERTNSGSGVLSTLTINNVMEDFQTHYNCTAWNSFGPGTAIIQLEER
EVLVPGIAGATIGASILLIFFFIALVFFLYRRRKGSRKDVTLRKLDIKVETVNREPLTMHSDREDDTAS
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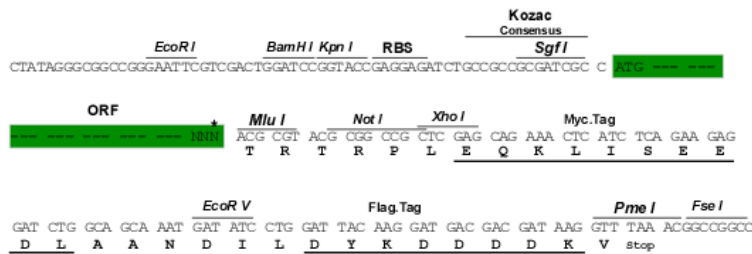
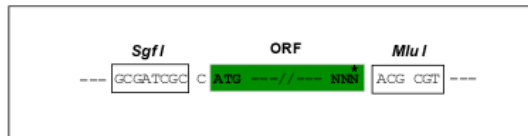
TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8102_d10.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_018240

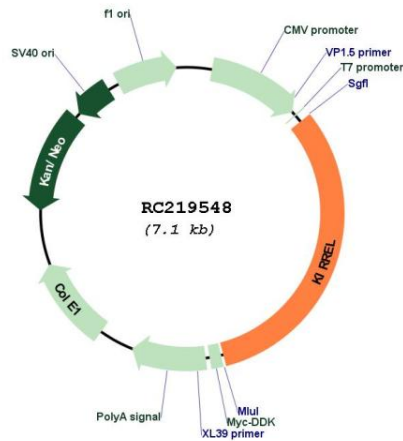
ORF Size: 2271 bp

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](#)

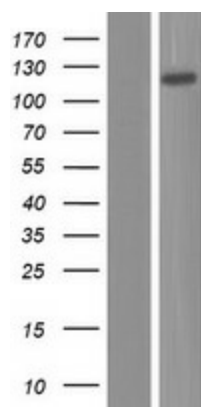
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_018240.7</u>
RefSeq Size:	3628 bp
RefSeq ORF:	2274 bp
Locus ID:	55243
UniProt ID:	<u>Q96J84</u>
Cytogenetics:	1q23.1
Protein Families:	Transmembrane
MW:	83.5 kDa
Gene Summary:	NEPH1 is a member of the nephrin-like protein family, which includes NEPH2 (MIM 607761) and NEPH3 (MIM 607762). The cytoplasmic domains of these proteins interact with the C terminus of podocin (NPHS2; MIM 604766), and the genes are expressed in kidney podocytes, cells involved in ensuring size- and charge-selective ultrafiltration (Sellin et al., 2003 [PubMed 12424224]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC219548



Western blot validation of overexpression lysate (Cat# [LY413182]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219548 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).