

## Product datasheet for MR229920

### Rxra (NM\_001290481) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rxra (NM_001290481) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rxra
Synonyms:	9530071D11Rik; Nr2b1; RXRalpha1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR229920 representing NM_001290481 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCTGTCCCCTCGCTGCACCCCTCCTTGGGTCCGGGAATCGGCTCTCCACTGGGCTCGCCTGGGCAGC  
TGCCTCTCCTATCAGCACCCCTGAGCTCCCCATCAATGGCATGGTCCGCCCTTCTCTGTCATCAGCTC  
CCCCATGGGCCCGCACTCCATGTGGTACCCACCACCCACATTGGGCTTCGGGACTGGTAGCCCCAG  
CTCAATTCACCCATGAACCCTGTGAGCAGCACTGAGGATATCAAGCCGCCACTAGGCCTCAATGGGTCC  
TCAAGTTCTGCCCATCCCTCAGGAAATATGGCTCCTTCAACCAAGCACATCTGTGCTATCTGTGGGA  
CCGCTCCTCAGGCAAACTATGGGGTATACAGTTGTGAGGGCTGCAAGGGCTTCTTCAAGAGGACAGTA  
CGCAAAGACCTGACCTACACCTGCCGAGACAACAAGGACTGCCTGATCGACAAGAGACAGCGGAACCGGT  
GTCAGTACTGCCGCTACCAGAAGTGCCTGGCCATGGGCATGAAGCGGGAAGCTGTGCAGGAGGAGCGGCA  
GCGGGGCAAGGACCGGAATGAGAACGAGGTGGAGTCCACCAGCAGTGCCAACGAGGACATGCCTGTAGAG  
AAGATTCTGGAAGCCGAGCTTGTGTGAGCCCAAGACTGAGACATACGTGGAGGCAAACATGGGGCTGA  
ACCCAGCTCACAAATGACCCCTGTTACCAACATCTGTCAAGCAGCAGACAAGCAGCTCTTCACTCTTGT  
GGAGTGGGCAAGAGGATCCCACTTTTCTGAGCTGCCCTAGACGACCAAGTTCATCCTGCTACGGGCA  
GGCTGGAACGAGCTGCTGATCGCTCCTTCTCCACCGCTCCATAGCTGTGAAAGATGGGATTCTCTGG  
CCACCGGCTGCACGTACACCGAACAGCGCTCACAGTGTGGGGTGGGCGCCATCTTTGACAGGGTGT  
AACAGAGCTGGTGTCTAAGATGCGTGACATGCAGATGGACAAGACGGAGCTGGGCTGCCTGCGAGCCATT  
GTCCTGTTCAACCCTGACTCTAAGGGGCTCTCAAACCCTGCTGAGGTGGAGGCGTTGAGGGAGAAGGTGT  
ATGCGTCACTAGAAGCGTACTGCAAACACAAGTACCCTGAGCAGCCGGCAGGTTTGCAAGCTGCTGCT  
CCGCTGCCTGCACTGCGTTCATCGGGCTCAAGTGCCTGGAGCACCTGTTCTTCTTCAAGCTCATCGGG  
GACACGCCATCGACACCTTCTCATGGAGATGCTGGAGGCACCACATCAAGCCACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR229920 representing NM\_001290481  
 Red=Cloning site Green=Tags(s)

MAVPSLHPSLPGIGSPLGSPGQLHSPISLTLSSPINGMGPFFSVISSPMGPHSMSVPTTPTLGFGTGSPQ  
 LNSPMNPVSSSTEDIKPLGLNGVLKVPAPHSNMAFSTKHICAI CGDRSSGKHVYVSSCEGCKGFFKRTV  
 RKDLTYTCRDNDKCLIDKRQRNRCQYCRYQKCLAMGMKREAVQEERQRGKDRNENEVESTSSANEDMPVE  
 KILEAELAVEPKTETYVEANMGLNPSSPNDPVTNICQAADKQLFTLVEWAKRIPHFSELPLDDQVILLRA  
 GWNELLIASFHSRSIAVKDGILLATGLHVHRNSAHSAGVAIFDRVLTLYVSKMRDMQMDKTELGLCLRAI  
 VLFNPD SKGLSNPAEVEALREKVVYASLEAYCKHKYEPQGRFAKLLLRLPALRSIGLKCLEHLFFFKLIG  
 DTPIDTFLMEMLEAPHQAT

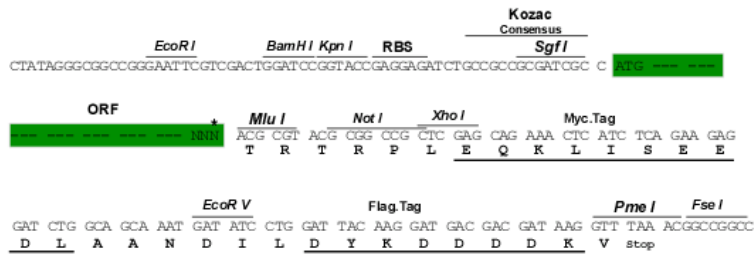
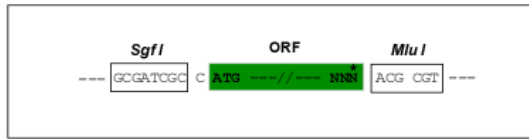
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

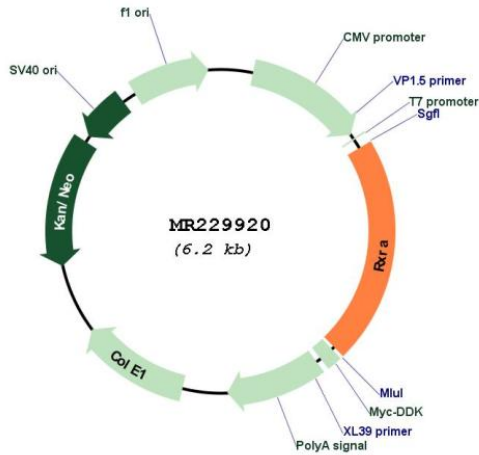
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_001290481

<b>ORF Size:</b>	1317 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>	<a href="#">NM_001290481.1</a> , <a href="#">NP_001277410.1</a>
<b>RefSeq Size:</b>	5088 bp
<b>RefSeq ORF:</b>	1320 bp
<b>Locus ID:</b>	20181
<b>Cytogenetics:</b>	2 19.38 cM
<b>MW:</b>	48.7 kDa
<b>Gene Summary:</b>	Receptor for retinoic acid. Retinoic acid receptors bind as heterodimers to their target response elements in response to their ligands, all-trans or 9-cis retinoic acid, and regulate gene expression in various biological processes. The RAR/RXR heterodimers bind to the retinoic acid response elements (RARE) composed of tandem 5'-AGGTCA-3' sites known as DR1-DR5. The high affinity ligand for RXRs is 9-cis retinoic acid. RXRA serves as a common heterodimeric partner for a number of nuclear receptors. In the absence of ligand, the RXR-RAR heterodimers associate with a multiprotein complex containing transcription corepressors that induce histone acetylation, chromatin condensation and transcriptional suppression. On ligand binding, the corepressors dissociate from the receptors and associate with the coactivators leading to transcriptional activation. The RXRA/PPARA heterodimer is required for PPARA transcriptional activity on fatty acid oxidation genes such as ACOX1 and the P450 system genes.[UniProtKB/Swiss-Prot Function]