

## Product datasheet for **RC220474**

### MR1 (NM\_001531) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MR1 (NM\_001531) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MR1  
**Synonyms:** HLALS  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC220474 representing NM\_001531  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGAACTGATGGCGTTCTGTTACCTCTCATCATTGTGTTAATGGTGAAGCACAGCGATTCCCGGA  
CGCACTCTCTGAGATATTTTCGCTGGCGTTTCGGATCCCATCCGTGGGGTCCCTGAATTTATTTTCGGT  
TGGGTACGTGGACTCGCACCTATCACCACATATGACAGTGTCACTCGGCAGAAGGAGCCACGGGCCCA  
TGGATGGCAGAGAACCTCGGCCTGATCACTGGGAGAGGTACACTCAGCTGCTGAGGGGCTGGCAGCAGA  
TGTTCAAGGTGGAAGTGAAGCGCTACAGAGGCACTACAATCACTCAGGGTCTCACACTACCAGAGAAT  
GATTGGCTGTGAGCTGCTGGAGGATGGAAGCACACAGGATTTCTGCAGTATGCATATGACGGGCAGGAT  
TTCTGATCTTCAATAAAGACACCCTCTCTGGCTGGCTGTAGATAATGTGGCTCACACCATCAAGCAGG  
CATGGGAGGCCAATCAGCATGAGTTGCTGTATCAAAAGAATTGGCTGGAAGAAGAATGTATTGCCTGGCT  
AAAGAGATTCTGGAGTATGGGAAAGACACCCTACAAAGAAGCAGAGCCCCACTGGTCAGAGTAAATCGC  
AAAGAACTTTCCAGGGTTACAGCTCTTCTGCAAAGCTCATGGCTTTTACCCCCAGAAATTTACA  
TGACATGGATGAAAAACGGGAAGAAATGTCCAAGAAATTGATTATGGAGACATTTCTCCAGTGGGGA  
TGAACCTATCAGGCGTGGGCATCAATTGAGCTTGATCCTCAGAGCAGCAACCTTTACTCCTGTCATGTG  
GAGCACTGCGGTGTCCACATGGTTCTTCAGGTCCCCAGGAATCAGAACTATCCCTCTTGTGATGAAAG  
CTGTCTCTGGGTCCATTGCTTGTGCTGCTGGCTGGAGTTGGTGTCTAGTCTGGAGAAGAAGGCC  
CCGAGAGCAAAATGGAGCCATCTACCTTCCAACACCAGATCGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC220474 representing NM\_001531  
Red=Cloning site Green=Tags(s)

MGELMAFLLPLIIVLMVKHSDSRTHSLRYFRLGVSDPIRGVPEFISVGYVDSHPITTYDSVTRQKEPRAP  
 WMAENLAPDHWERYTQLLRGWQQMFKVELKRLQRHYNHSGSHTYQRMIGCELLEDGTTGFLQYAYDGD  
 FLIFNKDTLSWLAVDNVAHTIKQAWEANQHELLYQKNWLEEECIAWLKRFLEYGKDTLQRTEPPLVRVNR  
 KETFFPGVTALFCKAHGFYPPEIYMTWMKNGEEIVQEIDYGDILPSGDGTQAWASIELDPQSSNLYSCHV  
 EHCgvHMVLQVPQESETIPLVMKAVSGSIVLVIVLAGVGLVWRRRPREQNGAIYLPPTDR

TRTRPLEQKLISEEDLAANDILDYKDDDDK

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6106\\_h02.zip](https://cdn.origene.com/chromatograms/mk6106_h02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001531

**ORF Size:** 1023 bp

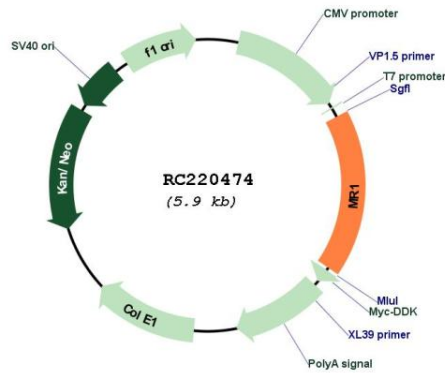
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

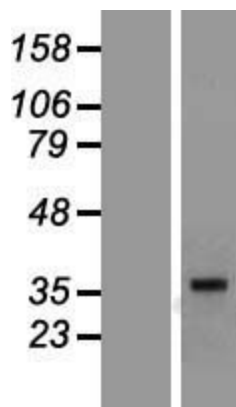
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001531.2</a>
<b>RefSeq Size:</b>	1263 bp
<b>RefSeq ORF:</b>	1026 bp
<b>Locus ID:</b>	3140
<b>UniProt ID:</b>	<a href="#">Q95460</a>
<b>Cytogenetics:</b>	1q25.3
<b>Domains:</b>	MHC_I, IGc1
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	39.2 kDa
<b>Gene Summary:</b>	MAIT (mucosal-associated invariant T-cells) lymphocytes represent a small population of T-cells primarily found in the gut. The protein encoded by this gene is an antigen-presenting molecule that presents metabolites of microbial vitamin B to MAITs. This presentation may activate the MAITs to regulate the amounts of specific types of bacteria in the gut. Several transcript variants encoding different isoforms have been found for this gene, and a pseudogene of it has been detected about 36 kbp upstream on the same chromosome. [provided by RefSeq, Jul 2015]

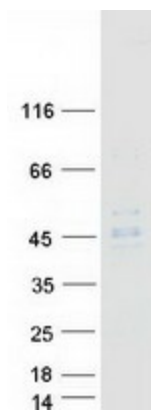
Product images:



Circular map for RC220474



Western blot validation of overexpression lysate (Cat# [LY419881]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220474 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MR1 protein (Cat# [TP320474]). The protein was produced from HEK293T cells transfected with MR1 cDNA clone (Cat# RC220474) using MegaTran 2.0 (Cat# [TT210002]).