

Product datasheet for **RG220474**

MR1 (NM_001531) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MR1 (NM_001531) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MR1
Synonyms: HLALS
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220474 representing NM_001531
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAACTGATGGCGTTCTGTTACCTCTCATCATTGTGTTAATGGTGAAGCACAGCGATTCCCGGA
CGCACTCTCTGAGATATTTTCGCTGGCGTTTCGGATCCCATCCATGGGGTCCCTGAATTTATTTTCGGT
TGGGTACGTGGACTCGCACCTATCACCACATATGACAGTGTCACTCGGCAGAAGGAGCCACGGGCCCA
TGGATGGCAGAGAACCTCGGCCTGATCACTGGGAGAGGTACACTCAGCTGCTGAGGGGCTGGCAGCAGA
TGTTCAAGGTGGAAGTGAAGCGCTACAGAGGCACTACAATCACTCAGGGTCTCACACTACCAGAGAAT
GATTGGCTGTGAGCTGCTGGAGGATGGAAGCACACAGGATTTCTGCAGTATGCATATGACGGGCAGGAT
TTCTGATCTTCAATAAAGACACCCTCTCTGGCTGGCTGTAGATAATGTGGCTCACACCATCAAGCAGG
CATGGGAGGCCAATCAGCATGAGTTGCTGTATCAAAGAATTGGCTGGAAGAAGAATGTATTGCCTGGCT
AAAGAGATTCTGGAGTATGGGAAAGACACCCTACAAAGAACAGAGCCCCACTGGTCAGAGTAAATCGC
AAAGAACTTTCCAGGGTTACAGCTCTTCTGCAAAGCTCATGGCTTTTACCCCCAGAAATTTACA
TGACATGGATGAAAAACGGGGAAGAAATGTCCAAGAAATTGATTATGGAGACATTTCCCAAGTGGGA
TGAACCTATCAGGCGTGGGCATCAATTGAGCTTGATCCTCAGAGCAGCAACCTTTACTCCTGTCATGTG
GAGCACTGCGGTGTCCACATGGTTCTTCAGGTCCCCAGGAATCAGAACTATCCCTCTTGTGATGAAAG
CTGTCTCTGGGTCCATTGTCTTGTTCATTGTGCTGGCTGGAGTTGGTGTCTAGTCTGGAGAAGAAGGCC
CCGAGAGCAAAATGGAGCCATCTACCTTCCAACACCAGATCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

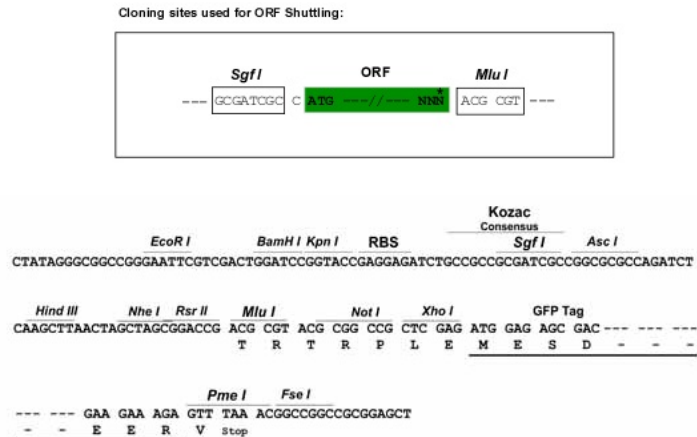
Protein Sequence: >RG220474 representing NM_001531
Red=Cloning site Green=Tags(s)

MGELMAFLLPLIIVLMVKHSDSRTHSLRYFRLGVSDPIHGVPFISVGYVDSHPITTYDSVTRQKEPRAP
 WMAENLAPDHWERYTQLLRGWQQMFKVELKRLQRHYNHSGSHTYQRMIGCELLEDGSTTGFLQYAYDGQD
 FLIFNKDTLSWLAVDNVAHTIKQAWEANQHLLYQKNWLEEECIAWLKRFLEYGKDTLQRTEPPLVRVNR
 KETFFPGVTALFCKAHGFYPPEIYMTWMKNGEEIVQEIDYGDILPSGDGTQAWASIELDPQSSNLYSCHV
 EHCQVHMLQVPQESETIPLVMKAVSGSIVLVIVLAGVGLVWRRRPREQNGAIYLPDPDR

TRTRPLE - GFP Tag - V

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).

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_001531.2](#)

RefSeq Size: 1263 bp

RefSeq ORF: 1026 bp

Locus ID: 3140

UniProt ID: [Q95460](#)

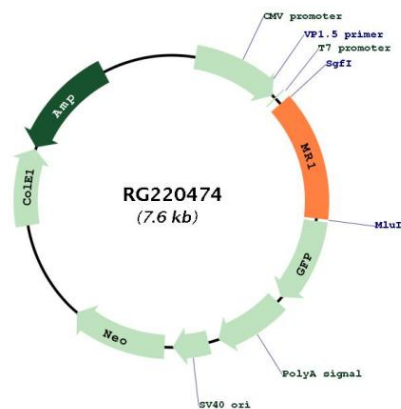
Cytogenetics: 1q25.3

Domains: MHC_I, IGc1

Protein Families: Transmembrane

Gene Summary: 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 RG220474