

## Product datasheet for **MG222586**

### Rarres2 (NM\_027852) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rarres2 (NM\_027852) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Rarres2  
**Synonyms:** 0610007L05Rik; AI303516  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG222586 representing NM\_027852  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGTTCCTTGCTGATCTCCCTAGCCCTATGGCTGGGCACAGTGGGCACACGTGGGACAGAGCCCGAAC  
TCAGCGAGACCCAGCGCAGGAGCCTACAGGTGGCTCTGGAGGAGTTCCACAAACACCCACCTGTGCAGTT  
GGCCTTCCAAGAGATCGGTGTGGACAGAGCTGAAGAAGTGTCTTCTCAGCTGGCACCTTTGTGAGGTTG  
GAATTTAAGCTCCAGCAGACCAACTGCCCAAGAAGGACTGGAAAAGCCGGAGTGCACAATCAAACCAA  
ACGGGAGAAGGCGGAAATGCCTGGCCTGCATTAATAATGGACCCCAAGGTTAAAATTCTAGCCGGATAGT  
CCACTGCCAATTCTGAAGCAAGGGCCTCAGGATCCTCAGGAGTTGCAATGCATTAAGATAGCACAGGCT  
GGCGAAGACCCACGGCTACTTCTACCTGGACAGTTTGCCTTCTCAGGGCCCTGAGAACCAAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG222586 representing NM\_027852  
Red=Cloning site Green=Tags(s)

MKFLLLISLALWLGVTRGTEPELSETQRRSLQVALEEFHKHPPVQLAFQEIGVDRAEEVLFSGTFVRL  
EFKLQQTNCPPKDWKPECTIKPNRRRKLACIKMDPKGKILGRIVHCPILKQGPQDPQELQCIIKIAQA  
GEDPHGYFLPGQFAFSRALRTK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_027852

**ORF Size:** 486 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\\_027852.2](#), [NP\\_082128.1](#)

**RefSeq Size:** 708 bp

**RefSeq ORF:** 489 bp

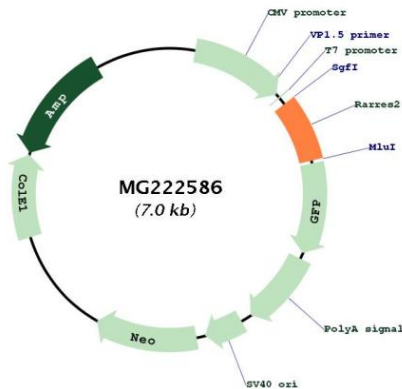
**Locus ID:** 71660

**UniProt ID:** [Q9DD06](#)

**Cytogenetics:** 6 B2.3

**Gene Summary:** Adipocyte-secreted protein (adipokine) that regulates adipogenesis, metabolism and inflammation through activation of the chemokine-like receptor 1 (CMKLR1). Its other ligands include G protein-coupled receptor 1 (GPR1) and chemokine receptor-like 2 (CCRL2). Positively regulates adipocyte differentiation, modulates the expression of adipocyte genes involved in lipid and glucose metabolism and might play a role in angiogenesis, a process essential for the expansion of white adipose tissue. Also acts as a proinflammatory adipokine, causing an increase in secretion of proinflammatory and prodiabetic adipokines, which further impair adipose tissue metabolic function and have negative systemic effects including impaired insulin sensitivity, altered glucose and lipid metabolism, and a decrease in vascular function in other tissues. Can have both pro- and anti-inflammatory properties depending on the modality of enzymatic cleavage by different classes of proteases. Acts as a chemotactic factor for leukocyte populations expressing CMKLR1, particularly immature plasmacytoid dendritic cells, but also immature myeloid DCs, macrophages and natural killer cells. Exerts an anti-inflammatory role by preventing TNF/TNFA-induced VCAM1 expression and monocytes adhesion in vascular endothelial cells. The effect is mediated via inhibiting activation of NF-kappa-B and CRK/p38 through stimulation of AKT1/NOS3 signaling and nitric oxide production. Exhibits an antimicrobial function in the skin.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG222586