

## Product datasheet for **RG236513**

### MS4A2 (NM\_001256916) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MS4A2 (NM\_001256916) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** MS4A2  
**Synonyms:** APY; ATOPY; FCER1B; FCERI; IGEL; IGER; IGHF; MS4A1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236513 representing NM\_001256916.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACACAGAAAGTAATAGGAGAGCAAATCTTGCTCTCCACAGGAGCCTTCCAGTGTGCCTGCATTT
GAAGTCTTGAAATATCTCCCGAGGAGTATCTCAGGCAGACTATTGAAGTCGGCTCATCCCCACCA
CTGCATACATGGCTGACAGTTTTGAAAAAGAGCAGGAGTTCTGGGTTTTCTATTTCTGGAATGTTG
TCAATTATCTGAAAGGAGAAATGCAACATATCTGGTGAGAGGAAGCCTGGGAGCAAACACTGCCAGC
AGCATAGCTGGGGAACGGGAATTACCATCTGATCATCAACCTGAAGAAGAGCTTGGCCTATATCCAC
ATCCACAGTTGCCAGAAATTTTTGAGACCAAGTGCTTTATGGCTTCCTTTCCACTGAAATTGTAGTG
ATGATGCTGTTTCTACCATTCTGGGACTTGGTAGTGCTGTGCACTCACAACTGTGGAGCTGGGGAA
GAACTCAAAGGAAACAAGTTCCAGAGGATCGTGTATGAAGAATTAACATATATTCAGCTACTTAC
AGTGAGTTGGAAGACCCAGGGGAAATGTCTCCTCCATTGATTTA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236513  
Blue=ORF Red=Cloning site Green=Tag(s)

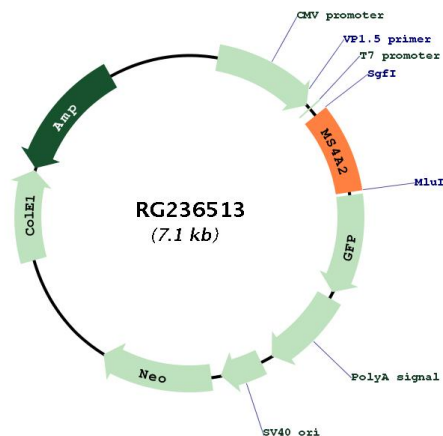
```
MDTESNRRANLALPQEPSSVPAFEVLEISPQEVSSGRLLKSASSPPLHTWLTVLKKQEFGLFSGML
SIISERRNATYLVKSLGANTASSIAGGTGITILIIINLKKSLAYIHIHSCQKFFETKCFMASFSTEIVV
MMLFLTILGLGSVSLTICGAGEELKGNKVPEDRVYEELNIYSATYSELEDPEMSPIDL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSDHMHFKSAIHPISILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001256916

**ORF Size:** 597 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).

RefSeq: [NM\\_001256916.1](#), [NP\\_001243845.1](#)

RefSeq Size: 3529 bp

RefSeq ORF: 600 bp

Locus ID: 2206

Cytogenetics: 11q12.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Asthma, Fc epsilon RI signaling pathway

MW: 22.1 kDa

**Gene Summary:** The allergic response involves the binding of allergen to receptor-bound IgE followed by cell activation and the release of mediators responsible for the manifestations of allergy. The IgE-receptor, a tetramer composed of an alpha, beta, and 2 disulfide-linked gamma chains, is found on the surface of mast cells and basophils. This gene encodes the beta subunit of the high affinity IgE receptor which is a member of the membrane-spanning 4A gene family. Members of this nascent protein family are characterized by common structural features and similar intron/exon splice boundaries and display unique expression patterns among hematopoietic cells and nonlymphoid tissues. This family member is localized to 11q12, among a cluster of membrane-spanning 4A gene family members. Alternative splicing results in multiple transcript variants encoding distinct proteins. Additional transcript variants have been described but require experimental validation. [provided by RefSeq, Mar 2012]