

Product datasheet for **MG214814**

Gm4301 (NM_001166637) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Gm4301
Synonyms:	100043224
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG214814 representing NM_001166637, **codon optimized**.
Due to the complexity of NM_001166637, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAACATATGGCTGATAAAATGGATATGAGTCTCGAAGACATTCTTAAGCTGAACAAGATGCAGCAGG
GTCGGCTGGATCGGCCGACTCTCGGGTTAAGCGAGGAACAGGCCCAAAGCGCTACCGACCTGCTTTTAC
ACATGACGGCAGGAACAGATTGGCCCTTATTGCCGCCAAAACAGCTTCTTGATAAGTGGCAGCATGAC
CTCTTTATCGGTGGCTTCAGGGGACAGAACCACGTGGACACAGGAGCAAGCTGTTTCTTAGCAACTTGC
ACTTTGGGGTGAGCGAGCTGACATCCAGCTGCTCTTCGCTGAATTTGGGACTGAAGAAGAGTGCCGT
TCACTACGACAGGTGCGGTAGGTCACTGGGTACCGCCACGTGCATTTTGAGAGAAAGGCAGATGCCCTG
AAGGCCATGAGAGAGTATAATGGTGCCCTCTCGATGGAAGACCTATGAACATACACCTGGTGACATCCC
AGATAGACCGCCAGGGCAGGCCTGCCCTGAACTCAGACAAGGGTGGGATGACACGCAATCCAGGTTCCAGG
GGTGTGTCTGGCGGAGCAATAAGCGATGGACACTTGGTGGCAGCCAAGGACGGGGACGGCCACCAGC
CGAAATTCAGCTGCAGCAACAACAGCAGCAGCAGCAGCAGCAGCAGCAACAACAGCAAGAGG
AACAGAAACACCAGAAACAGCAGCAACAGAAAGCAGCAGCAGCAACAACAGAAACAGGGCCAGAACCATCA
GCACCAGCAGCAGCAGAAAGAAAAAGAGCTGCAGCAACTGTCTGTGAGGAACCTGACGCCAGCTGGAC
GCTTACCAGGAGATGATGGACACTTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >MG214814 representing NM_001166637
 Red=Cloning site Green=Tags(s)

MTTMADKMDMSLEDILKLNKMQQGRDRPDSRVKRGTPKRYRPAFTHDGRNRLAPYCRPKQLPDKWQHD
 LFIGGFRGQNHVDTGGKLFSLNHFVSDADIQLLFAEFGLKKS AVHYDRCGRSLGTAHVHFERKADAL
 KAMREYNGAPLDGRPMNIHLVTSQIDRQGRPALNSDKGGMTRNPGSGVL SGGGNKRWTLGGSQGRGRGTS
 RNSKLQQQQQQQQQQQQQQQEEQKHQKQQQQKQQQQKQGNHQHQQQQKEKELQQLSVEELDAQLD
 AYQEMMDTS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001166637

ORF Size: 867 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001166637.1](#), [NP_001160109.1](#)

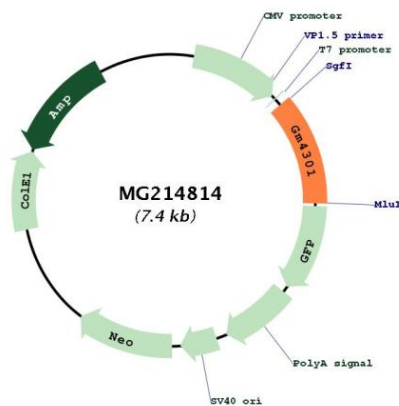
RefSeq Size: 914 bp

RefSeq ORF: 870 bp

Locus ID: 100043224

Cytogenetics: 10

Product images:



Circular map for MG214814