

## Product datasheet for **MG205246**

### Gale (NM\_178389) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Gale (NM\_178389) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Gale  
**Synonyms:** 2310002A12Rik; AI323962  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG205246 representing NM\_178389  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAAAGGTGCTGGTCACAGGTGGGGCTGGCTACATCGGCAGCCACACGGTATTGGAGCTGCTGGAGG  
 CAGGCTACTCACCTGTGGTCATTGACAACCTCCATAACGCCATTCGTGGAGAAGACTCCATGCCTGAGAG  
 CCTGCGCCGGTCCAGGAGTTGACAGGCCGCTCTGTGGAGTTGAGGAGATGGACATCTGGACCAGGCA  
 GCCCTACAGCACCTTTAAGAAGCACAGCTTTAAGGCCGTCATCCACTTTGCTGGCCTCAAGGCTGTGG  
 GCGAGTCAGTGCAGAAGCCTCTGGACTACTATAGAGTTAACTTAACAGGGACCATCCAGCTTCTAGAGAT  
 CATGAGGGCCACGGAGTGAAGAACCTGGTGTTCAGCAGCTCAGCCACCGTGTACGGGAACCCCAAGTAC  
 CTGCTCTGGATGAGGCCACCCACGGGGGGCTGTACCAACCCCTACGGCAAGTCCAAGTTCTTCATCG  
 AGGAGATGATCCGGGACCTGTGCCGGGCAGACACGGCCTGGAACGCCGTGCTGCTTCGGTACTTCAATCC  
 CATAGGCGCCACGCCTCTGGGCGCATCGGTGAAGATCCTCAGGGTATCCCAACAACCTCATGCCTAC  
 GTCTCCCAGGTGGCAATCGGGCGACGAGAGGCCCTGAATGTCTTTGGTGTGACTATGCTACAGAGGACG  
 GGACAGGTGTGAGGGATTACATTCACGTGGTGGACCTGGCGAAGGGCCATATAGCAGCCTGAAGAAGCT  
 GAAGGAGCAATGTGTTGCCGGACCTACAACCTGGGCACGGGCACAGGCTACTCTGTCTGCAGATGGTC  
 CAAGCCATGGAGAAAGCCTCAGGAAGAAGATCCCGTACAAGGTGGTGGCACGGCGGAAGGTGATGTGG  
 CGGCTGTTATGCCAACCCAGCCTGGCCATGAGGAGCTGGGCTGGACAGCAGCCCTGGGCTGGACAG  
 GATGTGTGAAGATCTGTGGCGCTGGCAGAAGCAGAACCCTTCGGGCTTTGGGGCGCAGGCC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG205246 representing NM\_178389  
 Red=Cloning site Green=Tags(s)

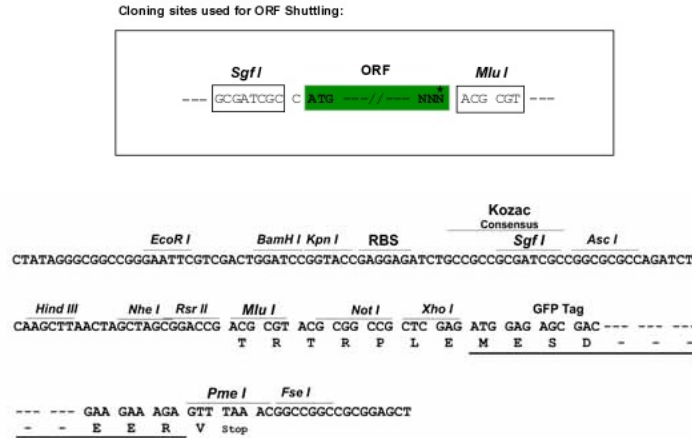
MEKVLVTGGAGYIGSHTVLELLEAGYSPVVIDNFHNAIRGEDSMPELRRVQELTGRSVEFEEMDILDQA  
 ALQHLFKKHSFKAVIHFAGLKAVGESVQKPLDYRVNLTGTIQLLEIMRAHGKLVFSSSATVYGNPQY  
 LPLDEAHP TGGCTNPGYKSKFFIEEMIRDLCRADTAWNALLRYFNPIGAHASGRIGEDPQGI PNNLMPY  
 VSQVAIGRRREALNVFGDDYATEDGTGVRDYIHVVDLAKGHIAALKLKEQCGRTYNLGTGTGYSVLQMV  
 QAMEKASGKKIPYKVVARRREGDVAACYANPSLAHEELGWTAALGLDRMCEDLWRWQKQNP SGFGAQA

TRTRPLE - GFP Tag - V

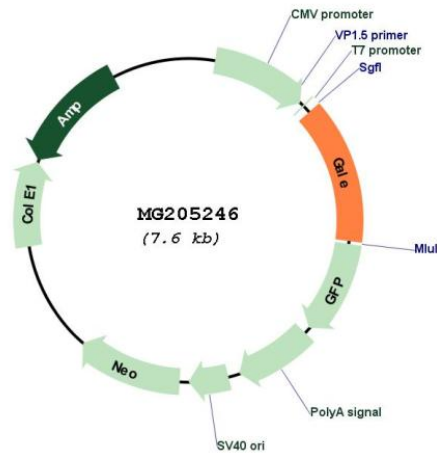
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_178389

ORF Size: 1041 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_178389.3</a> , <a href="#">NP_848476.1</a>
<b>RefSeq Size:</b>	1537 bp
<b>RefSeq ORF:</b>	1044 bp
<b>Locus ID:</b>	74246
<b>UniProt ID:</b>	<a href="#">Q8R059</a>
<b>Cytogenetics:</b>	4 D3
<b>Gene Summary:</b>	Catalyzes two distinct but analogous reactions: the reversible epimerization of UDP-glucose to UDP-galactose and the reversible epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The reaction with UDP-Gal plays a critical role in the Leloir pathway of galactose catabolism in which galactose is converted to the glycolytic intermediate glucose 6-phosphate. It contributes to the catabolism of dietary galactose and enables the endogenous biosynthesis of both UDP-Gal and UDP-GalNAc when exogenous sources are limited. Both UDP-sugar interconversions are important in the synthesis of glycoproteins and glycolipids. [UniProtKB/Swiss-Prot Function]