

## Product datasheet for **MG226388**

### C3 (NM\_009778) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	C3 (NM_009778) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	C3
Synonyms:	A1255234; ASP; HSE-MSF; Plp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226388 representing NM_009778 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGACCAGCTTCAGGGTCCCAGCTACTAGTGTACTGCTGCTGTTGGCCAGCTCCCCATTAGCTCTGG  
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ACCTACCTGGTTATGAACAAGGGGAAGCTCCTGAAGGCAGGCCGCCAGGTTCTGGGAGCCTGGCCAGGACC  
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226388 representing NM\_009778  
 Red=Cloning site Green=Tags(s)

MGPASGSQLLVLLLLASSPLALGIPMYSIITPNVLRLESEETIVLEAHDAGQDIPVTVTVQDFLKRQVL  
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 LIQPGSVKVVSYNLEESCTRFYHPEKDDGMLSKLCHSEMCRCAEENCFMQQSQEKINLVRLDKACEPG  
 VDYVYKTEL TNIELLDDFDEYMTIQQVIKSGSDEVQAGQQRKFI SHIKCRNALK LQKGGKYL MWGLSSD  
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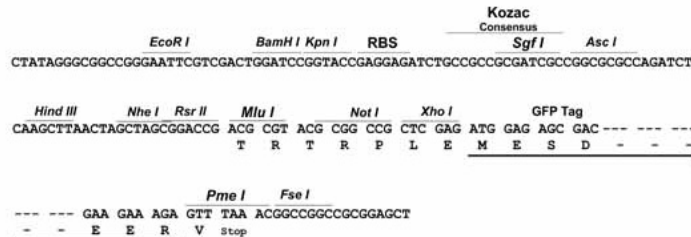
TRTRPLE - GFP Tag - V

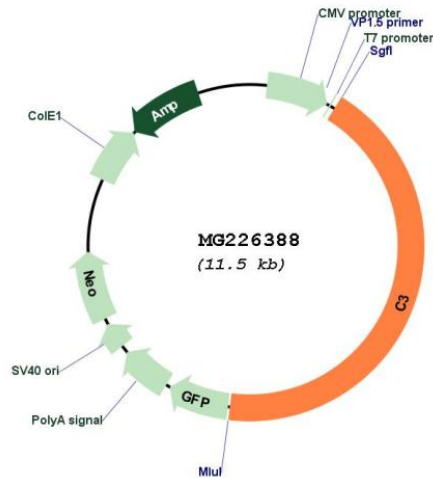
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_009778

**ORF Size:** 4989 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\\_009778.3](#)

**RefSeq Size:** 5147 bp

**RefSeq ORF:** 4992 bp

**Locus ID:** 12266

UniProt ID: [P01027](#)

Cytogenetics: 17 29.72 cM

**Gene Summary:** This gene encodes complement protein C3 which plays a central role in the classical, alternative and lectin activation pathways of the complement system. The encoded preproprotein undergoes a multi-step processing to generate various functional peptides. Mice deficient in the encoded protein fail to clear bacteria from the blood stream upon infection, display diminished airway hyperresponsiveness and lung eosinophilia upon allergen-induced pulmonary allergy, and develop severe lung injury after deposition of IgG immune complexes. Deficiency of the homolog of the encoded protein in humans was found to be associated with increased susceptibility to infections, age-related macular degeneration, and atypical hemolytic uremic syndrome. [provided by RefSeq, Mar 2015]