

Product datasheet for **MG220954**

F13a1 (NM_001166391) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	F13a1 (NM_001166391) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	F13a1
Synonyms:	1200014I03Rik; AI462306; F13a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG220954 representing NM_001166391
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAGATACTCCAGCAAGCACCTTTGGGGGAGGCGAGCAGTCCCGCCAATAACTCCAATGCTGCAG
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TTCAGATTCAAAGACGACCTACTATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG220954 representing NM_001166391
 Red=Cloning site Green=Tags(s)

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MSDTPASTFGGRRVPPNNSNAAEVDLPTTELQGLVPRGVNLKDYLNVTAVHLFKERWDSNKIDHHTDKY
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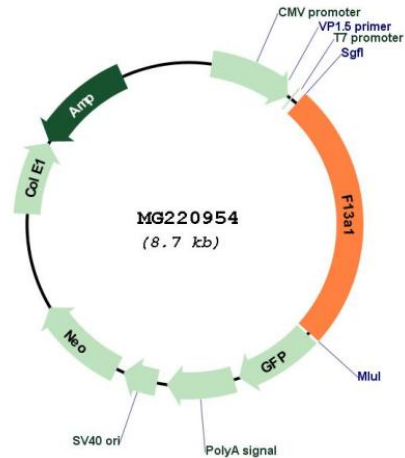
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001166391

ORF Size: 2196 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_001166391.1](#), [NP_001159863.1](#)

RefSeq Size: 3854 bp

RefSeq ORF: 2199 bp

Locus ID: 74145

UniProt ID: [Q8BH61](#)

Cytogenetics: 13 A3.3

Gene Summary: This gene encodes subunit A of the coagulation factor XIII that catalyzes the final step of the blood coagulation pathway. The encoded protein associates with subunit B to form a heterotetrameric proenzyme that undergoes thrombin-mediated proteolysis to generate active factor XIIIa. The transglutaminase activity of factor XIIIa is required for the calcium-dependent crosslinking of fibrin, leading to the formation of a clot. Mice lacking the encoded protein display impaired reproduction and reduced survival due to bleeding episodes, hemothorax, hemoperitoneum and subcutaneous hemorrhage. Additionally, mice lacking the encoded protein exhibit impaired wound healing and inadequate healing of myocardial infarction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]