

Product datasheet for **MG207705**

F10 (NM_007972) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	F10 (NM_007972) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	F10
Synonyms:	A11947; Cf10; fX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207705 representing NM_007972
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGAGCCCGGTGCAACTCAGCCTGCTCTGTGTTCCTGGCCAGCCTCCTGCTCCCTGGAAAGGTG
 TGTTTATTAACCGGGAACGTGCCAAACAATGTCTGGCGAGGACTCGGAGGGCAAACCTCATTTTTGAAGA
 GTTCAAGAAAGGAAATCTGGAAAGAGAGTGTATGGAAGAAATTTGTTCTTATGAAGAGGTCCGTGAAATC
 TTCGAGGACGACGAGAAGACGAAAGAATACTGGACCAAATATAAAGACGGCGACCAGTGTGAAAGCAGCC
 CTTGCCAGAACCAAGGAGCGTGTGAGATGGCATCGGGGGTTACACGTGCACCTGCTCGGAGGGATTGA
 AGGAAAAAAGTGTGAGCTCTTTGTTGGAAACTCTGCCGCTAGACAACGGAGACTGTGACCAGTTCTGC
 AGAGAAGAGCAGAAGTCAAGTGTGCTCCTGCCAGCGGTTACTTCTGGGTAATGATGGCAAGTCTCT
 GCATCTCCACAGCTCCCTCCCCTGTGGAAAAATCACTACAGGACGTAGGAAGAGGTCTGTGCCCTAAA
 CACCAGCGACAGTGTGACTTGAAGACGCCCTGCTTGTATGAGGATTTCTGTCCCCTACGGAGAAT
 CCTATTGAACTGCTCAACCTCAACGAGACACAGCCTGAGAGGAGCAGCGATGACCTTGTTCGGATTGTGG
 GTGGCCGGGAATGCAAGGATGGAGAATGTCCTGGCAGGCTCTGCTCGTTAACGAAGACAATGAAGGGTT
 CTGTGGGGCACCATCTTGAATGAGTTCTACATCCTCACTGCTGCCACTGTCTCCATCAGGCCAGGCGA
 TTCAAGGTGAGGGTAGGTGATCGGAACACAGAGAAGGAAGAAGGCAACGAGATGGTGCACGAGGTGGACG
 TGGTCATTAAGCACACAAGTTTCAGAGGGACACCTACGACTATGATATCGCCGTGCTGAGGCTGAAGAC
 TCCCATCACGTTCCGGATGAACGTGGCCCTGCCTGCCTGCCTCAGAAAGACTGGCCGAGTCCACACTG
 ATGACACAGAAGACGGGCATCGTGAGCGGGTTGGACGCACGCATGAGAAGGGCCGCCAGTCCGAACATCC
 TGAAGATGCTGGAGGTACCTACGTGGATCGCAACACTGCAAGCTCTCCACCAGCTTCAGCATCACATA
 GAATATGTTCTGTGCGGGCTATGAGGCCAAGTTAGAGGATGCCTGCCAGGGGGACAGTGGTGGCCCCCAT
 GTCACACGGTTCAAAAACACTACTATGTACCGGCAATTGTCAGCTGGGAGAGGGGTGTCAAGGAAAG
 GAAATATGGCATCTACACAAAGGTCACGACCTTCTCAAGTGGATTGACAGGTCCATGAAAGCCAGGGT
 GGGACCCACAGCCGAGACCCCAAGGACAGCAGGTCCGCCCAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

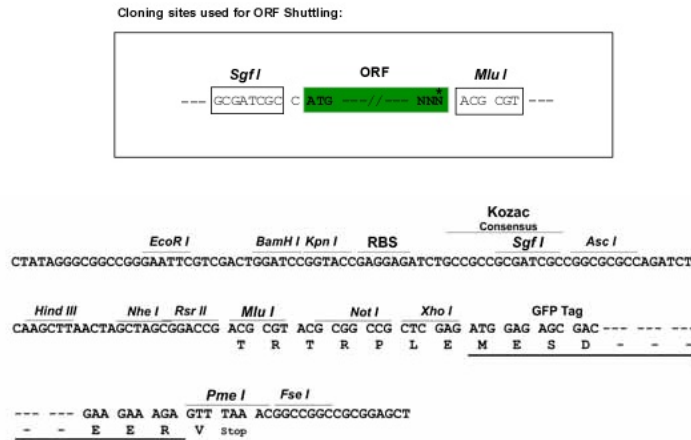
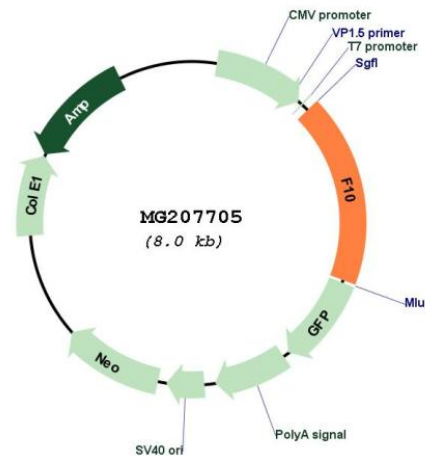
>MG207705 representing NM_007972
 Red=Cloning site Green=Tags(s)

MGSPVQLSLLCVVLASLLLPGKGVFINRERANNVLARTRRANSFFEEFKGNLERECMEEICSYEEVREI
 FEDDEKTKEYWTKYKDGQCESSPCQNQACRDIIGGYTCTCSEGFEGKNCELFVRKLCRLDNGDCDQFC
 REEQNSVVCSCASGYFLGNDGKSCISTAPFPCGKITTGRRKRVALNTSDSELDLEDALLEDLFLSPTEN
 PIELLNLNETQPERSSDDLVRIVGGRECKDGECPWQALLVNEDNEGFCGGTILNEFYILTAAHCLHQARR
 FKVRVGDNRNTEKEEGNEMVHEVDVVIKHNKFQRDITYDYDIAVLRKTPITFRMNVAPACLPOKDWAE
 STLMTQKTGIVSGFGRTHEKGRQSNILKMLEVPYVDRNTCKLSTFSITQNMFCAGYEAKLEDACQD
 SGGPHVTRFKNTYVVTGIVSWGEGCARKGKYGIYTKVTTFLKWIDRSMKARVGPTAETPRTAGPPN

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Plasmid Map:


ACCN: NM_007972

ORF Size: 1443 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_007972.2](#)

RefSeq Size: 2043 bp

RefSeq ORF: 1446 bp

Locus ID: 14058

UniProt ID: [O88947](#)

Cytogenetics: 8 5.73 cM

Gene Summary: This gene encodes factor X, a component of both the intrinsic and extrinsic blood coagulation pathways. The encoded protein is a zymogen that undergoes further processing in a vitamin K-dependent manner to generate mature factor X, a heterodimer comprised of disulfide-linked heavy and light chains. The mature factor X is proteolytically activated either by factor IXa (intrinsic pathway) or factor VIIa (extrinsic pathway) to form factor Xa serine endopeptidase. Activated factor Xa catalyzes the conversion of prothrombin to thrombin. A complete lack of the encoded protein is fatal to mice. A severe deficiency of the encoded protein in mice causes age-dependent iron deposition and cardiac fibrosis. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2015]