

Product datasheet for **MG208684**

Fpgs (BC005484) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fpgs (BC005484) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fpgs
Synonyms:	AA408187
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208684 representing BC005484
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTATCAGGATGCTGTGCGCAGCTCAACACCCTGCAAACCAATGCCAGCTACCTGGAGCAGGTAA
 AGCGCCAACGGAGTGACCCCGAGCGCAGCTGGAGGCTATGGAGATGTACCTGGCACGGAGTGGACTGCA
 GGTGGAGGACTTGAACCGGCTAAACATTATTCATGTCAGTGGGACCAAAGGGAAGGGCTCCACCTGTGCC
 TTCACCGAACGGATCCTGCGGAATTACGGCCTGAAGACCGGCTTCTTTAGCTCTCCTCACATGGTGCAGG
 TGCGGGAGCGGATTCGAATCAACGGGAAACCAATCAGCCCGAGCTTCCACCAAGCACTTCTGGTGCCT
 CTATAACCAGCTGGAGGAGTTCAAGGACGACAGCCATGTCTCCATGCCCTTACTTCCGCTTCTCACA
 CTCATGGCCTTCCATGTCTTCTCAAGAGAAGGTGGACCTGGCAGTGGTGGAGGTGGGCATTGGCGGGG
 CTTTTGACTGCACCAACATCATCAGAAAGCCAGTGGTGTGTGGAGTCTCCTCTCTTGGCATTGACCACAC
 CAGTCTACTAGGAGATACAGTGGAGAAAATAGCATGGCAGAAAGGGGGCATCTTTAAGCCTGGTGTCCCT
 GCCTTCACTGTGGTGCAGCCAGAAGTCCCTGGCTGTGCTGAGGGATCGAGCCAGCAGATTGGATGCC
 CGTTGTACCTGTGTCGCCATTGGAAGCCCTGGAGGAGTTGGACTGCCATTGAGCCTGGGTCTGGAGGG
 AGCACACCAGCGGTCTAATGCTGCCTTGGCCTTGACGCTGGCCCACTGTTGGCTGGAGCGGCAGGACCAC
 CAAGACATCCAGGAGCTGAAGGTATCCAGGCCAAGCATACGGTGGCAGCTGCCCTGGCACCTGTGTTCC
 GCCTACCCTCACATGAGGCGTGGGCTTCGGGACACAGTGTGGCCTGGCCGGACACAGATACTCCAGCG
 GGGACCCCTTACCTGGTACCTGGATGGCGCCCATACCACAGCAGTGTGCAGGCTGTGTGCACTGGTAC
 CGCCAGTATTGGAGCGCAGCAAACGCACCGTAGGAGGTCCGAAGTACACATCTTGCTCTTCAACTCTA
 CTGGTGACAGGGACTCTGCTGCCCTGCTGAAGCTGCTGCAGCCCTGCCAGTTTGACTACGCTGTCTTCTG
 CCCAACGTGACAGAGGTTTCATCCATAGGAAATGCAGACCAGCAGAACTTCACTGTGACTCTGGACCAG
 GTGCTGCTCCGCTGCCTCCAACACCAGCAGCATTGGAACGGCCTGGCTGAGAAACAGGCTAGCTCCAACC
 TCTGGAGCAGCTGCGGCCAGACCCTGCTGGGCCAGGCTCCCTGCTGCTGGCCCCGACCCACCTCAGCC
 TACTAGGACGAGCTCCCTCGTTTTAGCTGCATCTCCACGCCTTGTGTGGATCAGCCAAGGCCGGGAT
 CCCATCTTTCAGCCCCAGAGCCTTCCAAGGAATCTTCTCAACCACCCACAGCCAACAGCGGGGCCAGCA
 TTCTCCGTGAGGCTGCTGCCATCCATGTACTGGTTACAGGAAGCCTGCACCTGGTGGCGGGGTTCTGAA
 ACTGCTGGATCCCTCTATGTCCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208684 representing BC005484
 Red=Cloning site Green=Tags(s)

MEYQDAVRTLNLTQTNASYLEQVKRQRSDPQAQLEAMEMYLARSGLQVEDLNRLNIHVTGKKGSTCA
 FTERILRNYGLKTGFSSPHMVQVRERIRINGKPI SPELFTKHFWCLYNQLEEFKDDSHVSMPSYFRFLT
 LMAFHVFLQEKVDLAVVEVGIGGAFDCTNIIRKPVVCGVSSLGIDHTSLLGDTVEKIAWQKGGIFKPGVP
 AFTVVQPEGPLAVLRDRAQQIGCPLYLCPLEALEEVGLPLSLGLEGAHQRSNAALALQLAHCWLERQDH
 QDIQELKYSRPSIRWQLPLAPVFRPTPHMRRGLRDTVWPGRQTILQRGPLTWYLDGAHTTSSVQACVHWY
 RQSLERSKRTDGGSEVHILLFNSTGDRDSAALLKLLQPCQFDYAVFCPNVTEVSSIGNADQQNFTVTLTQ
 VLLRCLQHQQHWNGLAEKQASSNLWSSCGPDPAGPSLLLAPHPQPTRTSSLVFSCI SHALLWISQGRD
 PIFQPQSLPRNLLNHPTANS GASILREAAAIHVLTGSLHLVGGVLLKLLDPSMSQ

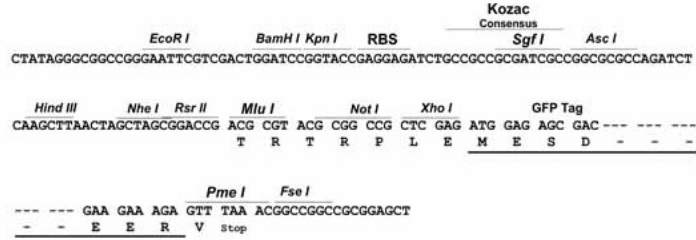
TRTRPLE – GFP Tag – V

Restriction Sites:

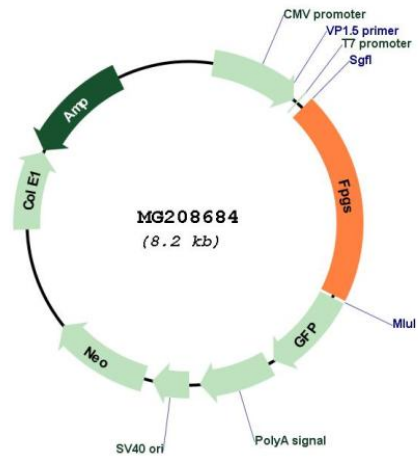
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:	BC005484
ORF Size:	1637 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:	<ol style="list-style-type: none">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:	BC005484 , AAH05484
RefSeq Size:	2215 bp
RefSeq ORF:	1637 bp
Locus ID:	14287
Cytogenetics:	2 22.09 cM
Gene Summary:	Catalyzes conversion of folates to polyglutamate derivatives allowing concentration of folate compounds in the cell and the intracellular retention of these cofactors, which are important substrates for most of the folate-dependent enzymes that are involved in one-carbon transfer reactions involved in purine, pyrimidine and amino acid synthesis. Dihydrofolate, tetrahydrofolate, 5,10-methylenetetrahydrofolate, 10-formyltetrahydrofolate and 5-formyltetrahydrofolate are the best substrates. Folic acid and 5-methyltetrahydrofolate can also act as substrates.[UniProtKB/Swiss-Prot Function]