

Product datasheet for **RG205788**

PDF (NM_022341) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PDF (NM_022341) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PDF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG205788 representing NM_022341
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCCGGCTGTGGGGCGCGCTGAGTCTTTGGCCACTGTGGGCGGCCGTGCCGTGGGGCGGGCGGCAG
 CCGTCGGTGTCCGGGCTTGACAGTCCACGGCCGCCCGGACGGCGTCGAGGGCCCGGCGCTGCGGCGCTC
 CTATTGGCGCCACCTGAGGCGTCTGGTGTGGTCTCCCGAACCGCCGTTCTCGACGTGTGCCAAGTC
 GGGGACCCGGTGCTGCGCGCGTGGCGGCCCGGTGGAGCGGGCGCAGCTAGGCGGGCCGAGCTGCAGC
 GGCTGACGCAACGGCTGGTCCAGGTGATCGGGCGCGCGCTGCGTGGGCCTAAGCGCGCCGACGTGGG
 GGTGCCCGCGCAGGTGCTGGCGCTGGAGCTCCCCGAGGCGCTGTGTCGGGAGTGCCCGCCCGCCAGCGC
 GCGCTCCGCCAAATGGAGCCCTTCCCCCTGCGCGTGTTCGTGAACCCAGCCTGCGAGTGCTTGACAGCC
 GCCTGGTACCTTTCCCGAGGGCTGCGAGAGCGTCGCGCGCTTCTGGCCTGCGTCCCCGCTTCCAGGC
 GGTGCAGATCTCAGGGCTGGACCCCAATGGAGAACAGGTGGTGTGGCAGGCGAGCGGGTGGGAGCCCGC
 ATCATCCAGCAGAGATGGACCACCTGCAGGGCTGCCTGTTTATTGACAAAATGGACAGCAGGACGTTCA
 CAAACGTCTATTGGATGAAGGTGAATGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205788 representing NM_022341
 Red=Cloning site Green=Tags(s)

MARLWGALSLWPLWAAVPWGGAAAVGVRACSSAAPDGVGEPALRRSYWRHLRRLVLGPPEPPF SHVCQV
 GDPVLRGVAAPVERAQLGGPELQRLTQRLVQVMRRRCVGLSAPQLGVPRQVLALELPEALCRECPPRQR
 ALRQMEPFPLRVFVNPSLRVLD SRLVTFPEGCE SVAGFLACVPRFQAVQISGLDPNGEQV VVWQASGWAAR
 IIQHEMDHLQGCLFIDKMSRTFTNVYWMKVND

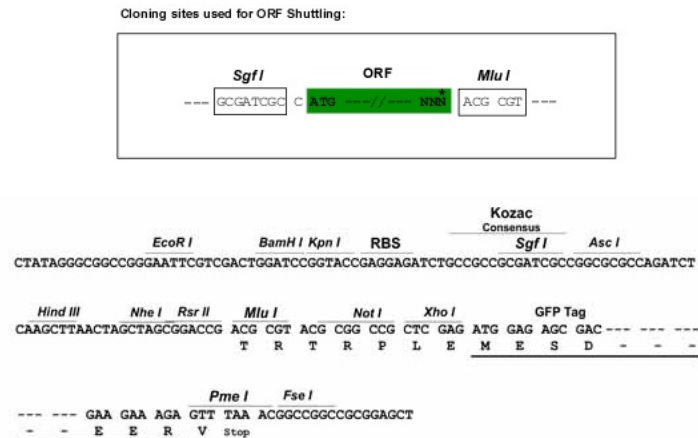
TRTRPLE - GFP Tag - V



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022341

ORF Size: 729 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_022341.2](#)

RefSeq Size: 1180 bp

RefSeq ORF: 732 bp

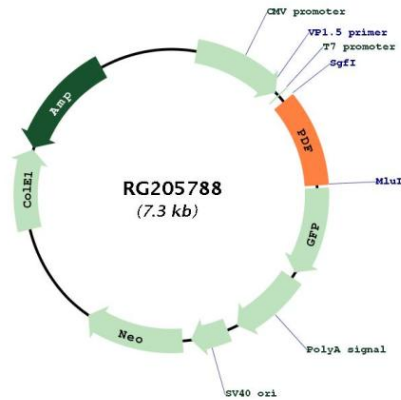
Locus ID: 64146

UniProt ID: [Q9HBH1](#)

Cytogenetics: 16q22.1

Gene Summary: Protein synthesis proceeds after formylation of methionine by methionyl-tRNA formyl transferase (FMT) and transfer of the charged initiator f-met tRNA to the ribosome. In eubacteria and eukaryotic organelles the product of this gene, peptide deformylase (PDF), removes the formyl group from the initiating methionine of nascent peptides. In eubacteria, deformylation of nascent peptides is required for subsequent cleavage of initiating methionines by methionine aminopeptidase. The discovery that a natural inhibitor of PDF, actinonin, acts as an antimicrobial agent in some bacteria has spurred intensive research into the design of bacterial-specific PDF inhibitors. In human cells, only mitochondrial proteins have N-formylation of initiating methionines. Protein inhibitors of PDF or siRNAs of PDF block the growth of cancer cell lines but have no effect on normal cell growth. In humans, PDF function may therefore be restricted to rapidly growing cells. [provided by RefSeq, Nov 2008]

Product images:



Circular map for RG205788