

Product datasheet for **RG216169**

NPVF (NM_022150) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: TurboGFP
Symbol: NPVF
Synonyms: C7orf9; RFRP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216169 representing NM_022150
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAATTATTTTCATCAAACTATTCATTTTATTGACTTTAGCCACTTCAAGCTTGTTAATCAACA
TTTTTTGTGCAGATGAATTAGTGATGTCCAATCTTCACAGCAAAGAAAATTATGACAAATATTCTGAGCC
TAGAGGATACCCAAAAGGGGAAAGAAGCCTCAATTTTGAGGAATTTAAAGATTGGGGACCAAAAATGTT
ATTAAGATGAGTACACCTGCAGTCAATAAAATGCCACACTCCTTCGCCAACTTGCCATTGAGATTTGGGA
GGAACGTTCAAGAAGAAAGAAGTGCTGGAGCAACAGCCAACCTGCCTCTGAGATCTGGAAGAAATATGGA
GGTGAGCCTCGTGAGACGTGTTCTAACCTGCCCAAAGGTTTGGGAGAACAAACAGCCAAAAGTGTC
TGCAGGATGCTGAGTGATTTGTGCAAGGATCCATGCATTACCATGTGCCAATGACTTATTTTACTCCA
TGACCTGCCAGCACCAAGAAATCCAGAATCCCGATCAAAAACAGTCAAGGAGACTGCTATTCAAGAAAT
AGATGATGCAGAATTGAAACAAGAAAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG216169 representing NM_022150
Red=Cloning site Green=Tags(s)

MEIISKLFILLTLATSSLLTSNIFCADELVMSNLHSENYDKYSEPRGYPKGERSLNFEELEKDWGPKNV
IKMSTPAVNKMPHSFANLPLRFGRNVQEERSAGATANLPLRSGRNMEVSLVRRVNPQLPQRFGRRTTAKSV
CRMLSDLCCQSMHSPCANDLFYSMTCQHQEIQNPDQKQSRRLLFKKIDDAELKQEK

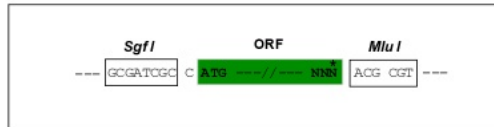
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGCTAGCTAGCGGACG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -
 --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT
 - - E E R V Stop

ACCN:	NM_022150
ORF Size:	588 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_022150.2 , NP_071433.2
RefSeq Size:	1190 bp

RefSeq ORF:	591 bp
Locus ID:	64111
UniProt ID:	Q9HCQ7
Cytogenetics:	7p15.3
Protein Families:	Druggable Genome, Secreted Protein
Gene Summary:	Neuropeptide RFRP-1 acts as a potent negative regulator of gonadotropin synthesis and secretion. Neuropeptides NPSF and NPVF efficiently inhibit forskolin-induced production of cAMP, but RFRP-2 shows no inhibitory activity. Neuropeptide RFRP-1 induces secretion of prolactin in rats. Neuropeptide NPVF blocks morphine-induced analgesia.[UniProtKB/Swiss-Prot Function]