

## Product datasheet for **RG211231**

### **NPAS4 (NM\_178864) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NPAS4 (NM_178864) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NPAS4
Synonyms:	bHLHe79; Le-PAS; NXF; PASD10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RG211231 representing NM\_178864  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTACCCTCCACCAAGGGCGCCTCCAAGGCGCGCCGGACCAGATCAACGCCGAGATCCGGAACCTCA  
 AGGAGCTGCTGCCGCTGGCCGAAGCGGACAAGGTCGGCTGTCTACCTGCACATCATGAGCCTCGCCTG  
 CATCTACACTCGCAAGGGCGTCTTCTTCGCTGGTGGCACTCCTCTGGCGGGCCCCACGGGCTTCTCTCA  
 GCTCAAGAGCTTGAGGACATCGTAGCGCACTACCCGGCTTTCTGCTTGTGTTACAGCCGAGGGGAAAT  
 TGCTCTACCTGTCTGAGAGTGTGAGCGAGCATCTGGCCACTCCATGGTGGACTGGTTGCCAGGGTGA  
 CAGCATCTACGACATCATTGACCAGCTGACCACCTCACTGTGCGCCAGCAACTCACCTGCCCTCTGCC  
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 CCCAGAAGACCACAGCTTCTGGAGGACTGGCCACATATGAAACCGCCTTTGAGACAGGTGTCTCAGCA  
 TTCCCCTATGATGGGTTTACTGATGAGTTGCATCAACTCCAGAGCCAAGTCAAGACAGCTTCCATGAAG  
 ATGGAAGTGGAGGGGAACCAACGTTT

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG211231 representing NM\_178864  
Red=Cloning site Green=Tags(s)

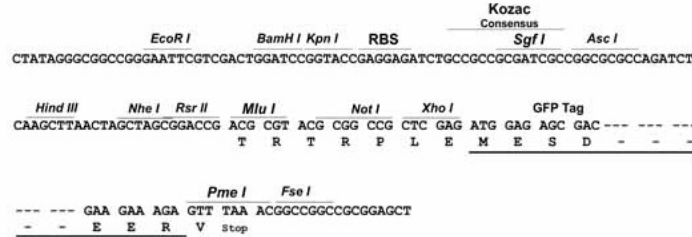
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EIDRLIQQISQLAQGMDRPFSAEAGTGGLEPLGGLEPLDSNLSL SGAGPPVLSLDLKPWKQELDFLADP  
DNMFLEETPVEDIFMDLSTDPSEEWGSGDPEAEGPGGAPSPCNNLSPEDHSFLEDLATYETAFETGVSA  
FPYDGFDELHQLQSQVQDSFHEDGSGGEPTF

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM\_178864

ORF Size: 2406 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_178864.4](#)

**RefSeq Size:** 3302 bp

**RefSeq ORF:** 2409 bp

**Locus ID:** 266743

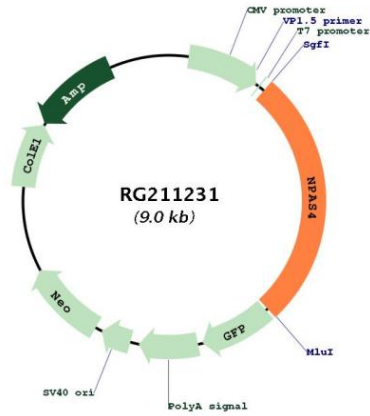
**UniProt ID:** [Q8IUM7](#)

**Cytogenetics:** 11q13.2

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:** NXF is a member of the basic helix-loop-helix-PER (MIM 602260)-ARNT (MIM 126110)-SIM (see SIM2; MIM 600892) (bHLH-PAS) class of transcriptional regulators, which are involved in a wide range of physiologic and developmental events (Ooe et al., 2004 [PubMed 14701734]). [supplied by OMIM, Mar 2008]

Product images:



Circular map for RG211231