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Product datasheet for RC211231

NPAS4 (NM_178864) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NPAS4 (NM_178864) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NPAS4
Synonyms:	bHLHe79; Le-PAS; NXF; PASD10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC211231 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTACCGCTCCACCAAGGGCGCCTCCAAGGCGCGCCGGGACCAGATCAACGCCGAGATCCGGAACCTCA
AGGAGCTGCTGCCGCTGGCCGAAGCGGACAAGGTCCGGCTGTCCTACCTGCACATCATGAGCCTCGCCTG
CATCTACACTCGCAAGGGCGTCTTCTTCGCTGGTGGCACTCCTCTGGCGGGCCCCACGGGGCTTCTCTCA
GCTCAAGAGCTTGAGGACATCGTAGCGGCACTACCCGGCTTTCTGCTTGTGTTCACAGCCGAGGGGAAAT
TGCTCTACCTGTCTGAGAGTGTGAGCGAGCATCTGGGCCACTCCATGGTGGACCTGGTTGCCCAGGGTGA
CAGCATCTACGACATCATTGACCCAGCTGACCACCTCACTGTGCGCCAGCAACTCACCCTGCCCTCTGCC
CTGGACACTGATCGCCTCTTCCGCTGCCGCTTCAACACCTCCAAGTCCCTCAGGCGCCAGAGTGCAGGCA
ACAAACTCGTGCTTATTCGAGGCCGATTCCATGCTCACCCACCTGGAGCCTACTGGGCAGGAAATCCCGT
GTTCACAGCTTTCTGTGCCCCTCTGGAGCCGAGACCCCGCCCAGGTCCTGGCCCTGGCCCTGGCCCTGCC
TCGCTCTTCCTGGCCATGTTCCAGAGCCGCCATGCTAAAGACCTGGCTCTACTGGACATCTCCGAGAGTG
TCCTAATCTACCTGGGCTTTGAGCGCAGTGAACTGCTTTGTAAATCATGGTATGGACTGCTGCACCCCGA
GGACCTGGCCCACGCTTCTGCTCAACACTACCGCCTGTTGGCTGAGAGTGGAGATATTCAGGCAGAGATG
GTGGTGAGGCTACAGGCCAAGACTGGAGGCTGGGCATGGATTTACTGCCTGTTATACTCAGAAGGTCCAG
AGGGACCCATTACTGCCAATAACTACCCAATCAGTGACATGGAAGCCTGGAGCCTCCGCCAGCAGTTGAA
CTCTGAAGACACCCAGGCAGCTTATGTCCTGGGCACTCCGACCATGCTGCCCTCATTCCCTGAAAACATT
CTTTCCCAGGAAGAGTGCTCCAGCACTAACCCACTCTTCACCGCAGCACTGGGGGCTCCCAGAAGCACCA
GCTTCCCCAGTGCTCCTGAACTGAGTGTTGTCTCTGCATCAGAAGAGCTTCCCCGACCCTCCAAAGAACT
GGACTTCAGTTACCTGACATTCCCTTCTGGGCCTGAGCCTTCTCTCCAAGCAGAACTAAGCAAGGATCTT
GTGTGCACTCCACCTTACACGCCCCATCAGCCAGGAGGCTGTGCCTTCCTCTTCAGCCTCCATGAGCCCT
TCCAGACCCATTTGCCCACCCCATCCAGCACTCTTCAAGAACAGCTGACTCCAAGCACTGCGACCTTCTC
TGATCAGTTGACGCCCAGCAGTGCAACCTTCCCAGATCCACTAACTAGCCCACTGCAAGGCCAGTTGACT
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CCAGCACAGCCACCTTCCCAGAGCCTCTGGGCAGCCCTGCCCATGAACAGCTGACTCCTCCCAGCACAGC
ATTCCAAGCACACCTGGACAGCCCCAGCCAAACCTTCCCAGAGCAACTGAGCCCCAACCCTACCAAGACT
TACTTTGCCCAGGAGGGATGCAGTTTTCTCTATGAGAAGTTGCCCCCAAGTCCTAGCAGCCCTGGTAATG
GGGACTGCACGCTCTTGGCCCTAGCCCAGCTCCGGGGCCCCCTCTCTGTGGATGTCCCCCTGGTGCCCGA
AGGCCTGCTCACACCTGAGGCCTCTCCAGTCAAGCAGAGTTTCTTCCACTACTCTGAAAAGGAGCAGAAT
GAGATAGACCGTCTCATCCAGCAGATTAGCCAATTGGCTCAGGGCATGGACAGACCCTTCTCAGCTGAGG
CTGGCACTGGCGGACTAGAGCCACTTGGAGGACTGGAGCCCCTGGACTCCAACCTGTCCCTGTCAGGGGC
AGGCCCCCCTGTGCTCAGCCTGGACCTGAAACCCTGGAAATGCCAGGAGCTGGACTTCCTGGCTGACCCT
GATAACATGTTCCTGGAAGAGACGCCCGTGGAAGACATCTTCATGGATCTCTCTACCCCAGATCCCAGTG
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CCCAGAAGACCACAGCTTCCTGGAGGACCTGGCCACATATGAAACCGCCTTTGAGACAGGTGTCTCAGCA
TTCCCCTATGATGGGTTTACTGATGAGTTGCATCAACTCCAGAGCCAAGTTCAAGACAGCTTCCATGAAG
ATGGAAGTGGAGGGGAACCAACGTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211231 protein sequence
Red=Cloning site Green=Tags(s)

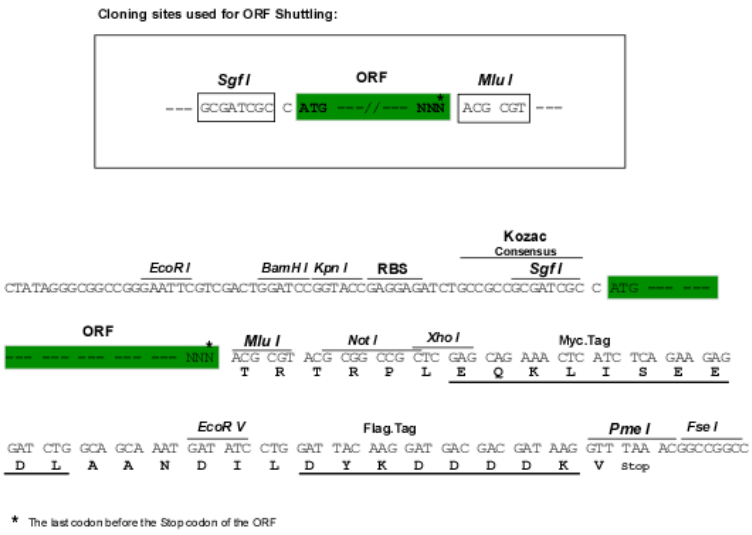
MYRSTKGASKARRDQINAEIRNLKELLPLAEADKVRLSYLHIMSLACIYTRKGVFFAGGTPLAGPTGLLS
AQELEDIVAALPGFLLVFTAEGKLLYLSESVSEHLGHSMVDLVAQGDSIYDIIDPADHLTVRQQLTLPSA
LDTDRLFRCRFNTSKSLRRQSAGNKLVLIRGRFHAHPPGAYWAGNPVFTAFCAPLEPRPRPGPGPGPGPA
SLFLAMFQSRHAKDLALLDISESVLIYLGFERSELLCKSWYGLLHPEDLAHASAQHYRLLAESGDIQAEM
VVRLQAKTGGWAWIYCLLYSEGPEGPITANNYPISDMEAWSLRQQLNSEDTQAAYVLGTPTMLPSFPENI
LSQEECSSTNPLFTAALGAPRSTSFPSAPELSVVSASEELPRPSKELDFSYLTFPSGPEPSLQAELSKDL
VCTPPYTPHQPGGCAFLFSLHEPFQTHLPTPSSTLQEQLTPSTATFSDQLTPSSATFPDPLTSPLQGQLT
ETSVRSYEDQLTPCTSTFPDQLLPSTATFPEPLGSPAHEQLTPPSTAFQAHLDSPSQTFPEQLSPNPTKT
YFAQEGCSFLYEKLPPSPSSPGNGDCTLLALAQLRGPLSVDVPLVPEGLLTPEASPVKQSFFHYSEKEQN
EIDRLIQQISQLAQGMDRPFSAEAGTGGLEPLGGLEPLDSNLSLSGAGPPVLSLDLKPWKCQELDFLADP
DNMFLEETPVEDIFMDLSTPDPSEEWGSGDPEAEGPGGAPSPCNNLSPEDHSFLEDLATYETAFETGVSA
FPYDGFTDELHQLQSQVQDSFHEDGSGGEPTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6692_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178864

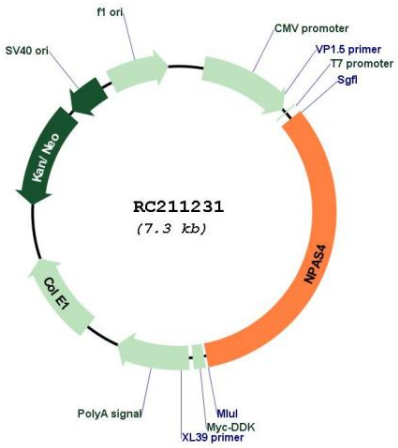
ORF Size: 2406 bp

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 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
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
MW:	87.1 kDa
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 RC211231