

Product datasheet for **RG208549**

NPAS2 (NM_002518) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NPAS2 (NM_002518) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NPAS2
Synonyms:	bHLHe9; MOP4; PASD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG208549 representing NM_002518
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGAAGATGAGAAAGACAGAGCCAAGAGAGCTTCTCGAAACAAGTCTGAGAAGAAGCGTCGGGACC
 AGTTCAATGTTCTCATCAAAGAGCTCAGTTCCATGCTCCCTGGCAACACGCGGAAAAATGGACAAAACCAC
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 ATGGCTTCATTATCGCAGTGACAACAGACGGCAGCATCATCTATGTCTCTGACAGTATCACGCCTCTCCT
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 TTGCACAGTGAGCAGCAGGACTCGCTACTTCTCTCCACCTACTACAACAGCCAGGGACCTGGGCTACC
 CCCAACCCACCCAGCACAGCCAGCCCTACGTCCTCCCCGAAGGGTCAGCAGTCTGTCTGAGTCGTC
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ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

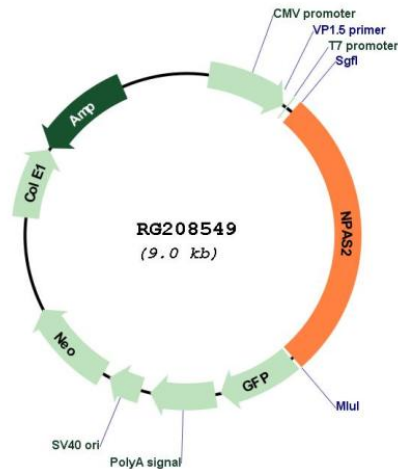
Protein Sequence: >RG208549 representing NM_002518
 Red=Cloning site Green=Tags(s)

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MDEDEKDRAKRASRNKSEKKRRDQFNVL IKELSSMLPGNTRKMDKTTVLEKVIQFLQKHNEVSAQTEICD
IQQDWKPSFSLSNEEFTQLMLEALDGFIIAVTTDGSIIYVSDSITPLLGHLPDVMQNLNLFPEQEHSE
VYKILSSHMLVTDSPSPEYLKSDSDLEFYCHLLRGSLNPKFPTYEYIKFVGNFRSYNNVPSPCNGFDN
TL SRPCRVP LGKEVCFIATVRLATPQFLKEMCIVDEPLEEFTSRHSLEWKFLFLDHRAPPIIGYLPFEVL
GTSGDYHYHIDDLELLARCHQHLMQFGKGKSCCYRFLTKGQQWIWLQTHYYITYHQWNSKPEFIVCTHSV
VSYADVRVERRQELALEDPPEALHSSALKDKGSSLEPRQHFNALDVGASGLNTSHSPSASSRSSHKSSH
TAMSEPTSTPTKLMAEASTPALPRSATLPQELPVPGLSQAATMPAPLPSPSSCDLTQQLLPQTVLQSTPA
PMAQFSAQFSMFQTIKDQLEQRTRILQANIRWQQEELHKIQEQLCLVQDSNVQMFLQQPAVSLSFSSTQR
PEAQQLQQRSAAVTQPQLGAGPQLPGQISSAQVTSQHLLRESSVISTQGPKPMRSSQLMQSSGRSGSSL
VSPFSSATAALPPSLNLTTPASTSQDASQCQSPDFSHDRQLRLLL SQIQPMMPGSCDARQPSEVSRTG
RQVKYAQSQT VFNPD AHPANSSAPMPVLLMGQAVLHPSFPASQPSLPQPAQARQQPPQHLYLQVQAPTS
LHSEQQD SLLLSTYSQQPGTLGYPPPAQPQLRPPRRVSSLESSGLQQPPR
  
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Plasmid Map:


ACCN: NM_002518

ORF Size: 2472 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.

RefSeq:	NM_002518.3 , NP_002509.2
RefSeq Size:	4004 bp
RefSeq ORF:	2475 bp
Locus ID:	4862
UniProt ID:	Q99743
Cytogenetics:	2q11.2
Domains:	PAS, HLH, PAC
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Circadian rhythm - mammal
Gene Summary:	The protein encoded by this gene is a member of the basic helix-loop-helix (bHLH)-PAS family of transcription factors. A similar mouse protein may play a regulatory role in the acquisition of specific types of memory. It also may function as a part of a molecular clock operative in the mammalian forebrain. [provided by RefSeq, Jul 2008]