

Product datasheet for **MG222175**

Npas1 (NM_008718) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Npas1 (NM_008718) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Npas1
Synonyms:	bHLHe11; MOP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222175 representing NM_008718
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGACCCCTATCCAGAAGCGGTGGCCGAGGTGAAGTCAAGTGCAGGGGCGGCCGTGGAGCCGGCG
 TCCCTGGGATTTCTGCCTGGGCTGATGGTCAAGGCCCGCCCGACCTGCCTGCAGGCGCAGCGCAA
 AGAGAAGTCCCGCAACGCTGCGCGCTGGCGACGCGGGAAGGAAATCTGGAGTTCTTCGAGCTAGCCAAG
 CTGCTCCCTCTGCCCCGTGCCATCTCCAGCCAGCTGGACAAGGCGTCCATCGTGCCTTACGCTCACCT
 ACCTCCGCTGCGTCTTTTCCGCGCTGGGGCGCCGCCCTGGGGTTGCGGGCGTCGGGCTCCGGC
 TGGCTCGCCCCAGGCCCGGAGGCCCTGTGGCTCTGGTCTCTGAAGTCTTCGAGCAACCTAGGTGGA
 CACATCTACAGTCTTGGATGGCTTCGTGTTGCTTTGAACCAGGAAGGAAATTTCTCTACATCTCAG
 AGACAGTGTCCATCTACCTGGGTCTCTACAGGTGGAGCTGACGGGCAGCAGCGTCTTCGACTACATCCA
 TCCTGGGACCACTCGGAGGTCTAGAGCAACTTGGATTGCGGGCTGCAAGCATCGGTCCCCTACACCA
 CCTTCCGTGTCTCTCTTCTCATCGTCTTCTCTCGCTGGTGGACACCCCTGAGATTGAAGCCAGCC
 CCACCGAGGCATCGCCTGCCTTCCGAGCCCAAGAGCGGTCTTCTTTGTCCGATGAAGTCCACCCTCAC
 CAAGAGGGGCTGAATGTCAAAGCCTCGGGGTACAAGGTCAATCATGTGACAGGGCGCCTGAGGGCCCGA
 GCCCTGGGTCTTGTAGCCCTTGGACACACGCTGCCCCAGCCCCACTGGCTGAGCTGCCTTTGCACGGAC
 ACATGATTGTCTTCCGCTCAGCCTGGGCTCACCATCTTGTGTGAGAGCAGAGTTAGCGACCATAT
 GGACATGGGGCCCTCAGAGCTTGTGGGACGAGCTGTACCACTTGTTCATGGACAGGATGCAACCAGG
 ATCCGCCAAAGCCATCTGACCTGCTGGACAAAGGCGAGGTGGTACTGGTTACTACCGTTGGCTGCAGC
 GTGCGGGGGCTTCGTGTGGCTGCAGTCTGTAGCCACTGTGGCCGGGAACGGGAAGAGCACTGGGGAGCA
 TCACGTGCTGTGGGTGAGTCACGTGCTCAGCAATGCTGAAGGTAGTCAAACACCCCTGGATGCCTTCCAG
 CTTCCAGCTATTGTGTCTCAGGAGGAGCCATCCAGGCCAGGCCAGGCCACAGAGGAAGAGCCTCCAG
 TTGACGGGAAGCAGGCTGTGCCTGCGGACCAGGACAAGGACAAGGACCCTCAGGCCCGAGGCAAACGCAT
 CAAAGTGGAGGCCAGCCGAAGGAAGCTAGAGGCTCAGAGGACAGTGGAGAAGAGGAGCTCTCGATCCA
 CCGGCTCCACCTCGGCCAGAATTCATTCTGTCTATCCGGCGGGAGCCCTGAAGCATGATCCAGTGTGC
 CGTGGGGCTTGACAACTCCCGGAGACCCCTACCCGCCCTCTTCATGCAGGCTTCTGCCACCCGTTGT
 GCGGGGCTGTGACCCAGGCACCATCCGCTATGGCCCTGCGGAGTTGAGCCTGATGTATCCACATCTG
 CACAGGCTGGGCGCAGGCCCTCGCTTCCAGAGGCCTTTTACCCTACGCTGGGCTTGCCTATCCGGGGC
 CCACAGGTACTAGGTTGACGCGAAGGGAGAC

ACGCGTACGCGGCGGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG222175 representing NM_008718
 Red=Cloning site Green=Tags(s)

MATPYPRSGGRGEVCKCGGGRGAGVPWDFLPGLMVKAPPGPCLQAQRKEKSRNAARWRRGKENLEFFELAK
 LLPLPGAISSQLDKASIVRLSVTYLRLRRFAALGAPPWGLRAVGPPAGLAPGRRGPVALVSEVFEQHLGG
 HILQSLDGFVFALNQEKGFLYISETVSIYGLSQVELTGSSVFDYIHPGDHSEVLEQLGLRAASIGPPTP
 PSVSSSSSSSSSLVDTPEIEASPTASPAFRAQERSFFVRMKSTLTKRGLNVKASGYKVIHVTGRLRAR
 ALGLVALGHTLPPAPLAELPLHGHMIVFRLSLGLTILACESRVSDHMDMGPSELVGRSCYQFVHQDQTR
 IRQSHLDLLDKGQVVTGYRWLQRAGGFVWLQSVATVAGNGKSTGEHHVLWVSHVLSNAEGSQTPLDQFQ
 LPAIVSQEESRPGPEPTTEEPVDGKQAVPADQDKDPQARGKRIKVEASPKAEGSEDSGEEELSDP
 PAPPRPEFTSVIRAGALKHDPVLPWGLTTPGDPSPALLHAGFLPPVVRGLCTPGTIRYGPaelSLMPHL
 HRLGAGPSLPEAFYPTLGLPYPGPTGTRVQRKGD

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_008718

ORF Size: 1782 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_008718.2](#), [NP_032744.1](#)

RefSeq Size: 2091 bp

RefSeq ORF: 1785 bp

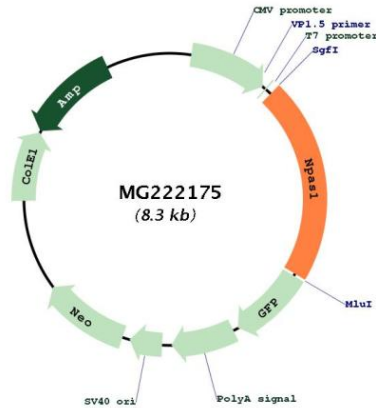
Locus ID: 18142

UniProt ID: [P97459](#)

Cytogenetics: 7 9.14 cM

Gene Summary: May control regulatory pathways relevant to schizophrenia and to psychotic illness. May play a role in late central nervous system development by modulating EPO expression in response to cellular oxygen level. Forms a heterodimer that binds core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) leading to transcriptional repression on its target gene TH (PubMed:27782878).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG222175