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Product datasheet for RR206019

Npas2 (NM_001108214) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Npas2 (NM_001108214) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Npas2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RR206019 representing NM_001108214
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACGAAGATGAGAAGGATAGAGCAAAGAGAGCCTCTCGAAACAAGTCTGAGAAGAAGCGTCGGGACC
AGTTCAATGTTCTCATCAAAGAGCTCAGCTCCATGCTCCCAGGCAACACTCGGAAACTGGACAAAACAAC
TGTGCTGGAGAAGGTCATCGGATTTCTGCAGAAACACAATGAAGTCTCAGCACAAACAGAAATCTGTGAC
ATCCAGCAGGACTGGAAGCCTTCATTCCTCAGTAACGAAGAATTCACCCAGCTGATGTTGGAGGCGTTAG
ATGGCTTCGTCATTGTTGTGACAACGGACGGCAGCATCATCTATGTGTCCGACAGCATCACGCCTCTCCT
CGGACATTTACCGTCGGATGTCATGGATCAGAACTTGTTAAATTTCCTTCCAGAACAAGAACATTCCGAA
GTTTATAAAATCCTTTCCTCCCATATGCTTGTGACGGATTCCCCCTCCCCAGAATTCCTAAAATCTGACA
ACGATTTAGAGTTTTATTGTCATCTTCTGAGAGGCAGCTTGAACCCAAAGGAATTTCCAACTTACGAATA
CATAAAATTTGTAGGAAATTTTCGCTCTTACAACAATGTGCCTAGCCCCTCCTGTAATGGCTTTGACAAC
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CACCACAGTTCTTAAAGGAAATGTGTGTAGCTGACGAACCTTTAGAGGAATTCACTTCGAGGCATAGCTT
GGAATGGAAATTTTTATTTCTGGATCACAGAGCCCCTCCAATCATAGGATACCTGCCCTTTGAAGTACTT
GGCACGTCAGGCTATGACTACTACCACATTGATGACCTGGAGCTCCTGGCCAGGTGCCACCAGCACTTGA
TGCAGTTTGGCAAAGGGAAGTCGTGTTGTTACCGGTTTCTAACCAAAGGACAGCAGTGGATTTGGTTGCA
AACCCACTACTACATCACCTACCACCAGTGGAACTCCAAGCCCGAGTTCATCGTGTGCACACACTCGGTG
GTCAGTTACGCAGATGTCCGAGTGGAAAGGAGACAGGAGCTGGCTCTGGAAGATCCACCCACAGAAGCCA
TGCACCCCTCTGCACTGAAGGAAAAGGACTCAAGCCTAGAGCCTCAGCCGCACTTTAATGCACTTGACAT
GGGTGCCTCAGGTCTTACCAGCAGTCCTTCGCCATCAGCATCCTCGAGGAGTTCCCACAAGTCCTCACAC
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GATCAGCCACCCTACCCCAGGAGTTACCAGTGCAGGGGCTCAGCCAGGCAGCCACAATGCCAGCTCCTCT
GCTTTCCTCATCATCCTGTGACCTTGCCAAGCAGCTCCTGCCTCAGTCCCTGCCTCAGACGGTCCTGCAG
AGTCCACCTGCTCCAGTGACACAGTTTTCAGCACAATTTAGCATGTTCCAGACCATAAAAGACCAGTTGG
AGCAGAGGACACGGATCCTGCAGGCCAACATTCGGTGGCAGCAGGAAGAGCTTCACAAGATCCAGGAACA
ACTCTGCCTGGTCCAGGACTCCAACGTCCAGATGTTTCTACAGCAGCCAGCGGTGTCTCTGAGCTTCAGC
GGTGCCCAGAGACCGGCAGCTCAGCAGCCACTGCAACAAAGGCCATCTGCACCGTCTCAGCCCCCGCTTG
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CTGAGCAGCCTGCCGTCCCAGTTCAGCAGCACAGCGTCCGTGCTCCCACCAGGCCTGAGCCTCACCACTG
TCGCTCCCACCCCTCAGGACACCAGCCAGTGCCAGCCCAGCCCTGACTTCGGCCATGATCGGCAGCTCAG
GCTGTTGCTGAGCCAACCCATCCAGCCTATGATGCCTGGGTCTTGTGATGCCAGGCAGCCCTCAGAAGTC
AGCAGGACTGGACGGCAAGTCAAATATGCACAGAGCCAAGTGACGTTTCCAAGTCCTGACTCCCACCCCA
CCAGCAGCAGCGCCCCCACCCCGGTCCTGTTGATGGGGCAGGCCGTGCTCCATCCCGGCTTCCCCGCATC
CCAGCCATCACCCCTGCAACCAACACAGGTACAACAGCAGCCACCACCCTATCTACAGGCACCAACATCT
CTGCACAGTGAACAGCCGGACTCGCTCCTTCTCTCCACCTTCTCCCAGCAGCCAGCACCTCTGGGCTATG
CAGCCACACAGCCTACACAGCCGCAACCCCCACGCCCTTCCCGCAGGGTCAGCCGGCTGTCAGAGTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

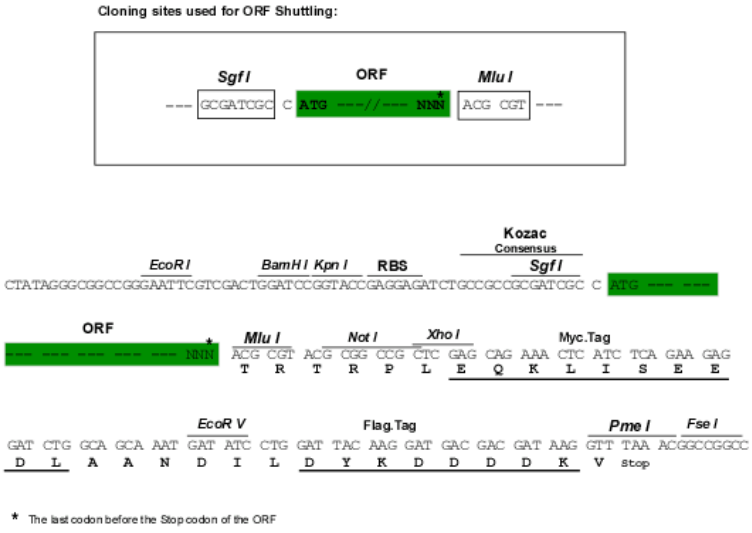
>RR206019 representing NM_001108214
Red=Cloning site Green=Tags(s)

MDEDEKDRAKRASRNKSEKKRRDQFNVLIKELSSMLPGNTRKLDKTTVLEKVIGFLQKHNEVSAQTEICD
IQQDWKPSFLSNEEFTQLMLEALDGFVIVVTTDGSIIYVSDSITPLLGHLPSDVMDQNLLNFLPEQEHSE
VYKILSSHMLVTDSPSPEFLKSDNDLEFYCHLLRGSLNPKEFPTYEYIKFVGNFRSYNNVPSPSCNGFDN
TLSRPCRVPLGKEVCFIATVRLATPQFLKEMCVADEPLEEFTSRHSLEWKFLFLDHRAPPIIGYLPFEVL
GTSGYDYYHIDDLELLARCHQHLMQFGKGKSCCYRFLTKGQQWIWLQTHYYITYHQWNSKPEFIVCTHSV
VSYADVRVERRQELALEDPPTEAMHPSALKEKDSSLEPQPHFNALDMGASGLTSSPSPSASSRSSHKSSH
TAMSEPTSTPTKLMAENSTTALPRSATLPQELPVQGLSQAATMPAPLLSSSSCDLAKQLLPQSLPQTVLQ
SPPAPVTQFSAQFSMFQTIKDQLEQRTRILQANIRWQQEELHKIQEQLCLVQDSNVQMFLQQPAVSLSFS
GAQRPAAQQPLQQRPSAPSQPPLVVNTPLPGQITSTQVTNQHLLRESNVMSAQGPKPIRSSQLLPASSRS
LSSLPSQFSSTASVLPPGLSLTTVAPTPQDTSQCQPSPDFGHDRQLRLLLSQPIQPMMPGSCDARQPSEV
SRTGRQVKYAQSQVTFPSPDSHPTSSSAPTPVLLMGQAVLHPGFPASQPSPLQPTQVQQQPPPYLQAPTS
LHSEQPDSLLLSTFSQQPAPLGYAATQPTQPQPPRPSRRVSRLSES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001108214

ORF Size: 2448 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.

RefSeq: NM_001108214.2, NP_001101684.2

RefSeq Size: 4273 bp

RefSeq ORF: 2451 bp

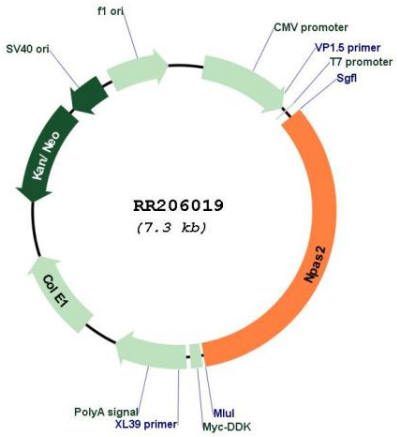
Locus ID: 316351

Cytogenetics: 9q22

MW: 90.8 kDa

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, Feb 2014]

Product images:



Circular map for RR206019