

Product datasheet for **MC224440**

Npat (NM_001081152) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Npat (NM_001081152) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Npat
Synonyms:	6820401K01; AI427561; BB112559
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224440 representing NM_001081152 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGCTGTTACCCTCGGATGTAGCCAGGCTGGTATTGGGTTACTTACAACAAGAAACCTTACATCTACTT
GCCAGACTTTTATTTGGAAAGTTCAAATTTAAAAGAATATGCAGAACTGTACTGATGAAGGTTTTAT
TCCAGCCTGCTTACTGTCCTTATTTGGAAAAAAGTTGACCACAATTTGAATGAGTATGTAGCTATGAAA
GCAAAAGAAACATCAAATGATGTCCCAACAATAATGTCATCTCTATGGAAGAAGCTAGACCACACTCT
CTCAGATCAGGAGCATGCACAGTTCTCCAGGGTTTGTGCCATCAGAGAGCTCGAACGAGAAATGGAAT
TGCAAAATCAAGCGGCAGCGATGGCTAGCATCTCAGGCAGCTCCCGTCAGTTTCAAGTTACTGGTTTTA
CCTTATGCTTCAGGACAGTTTACCACTTCTCCTTTGGTAGCCACACAAGCTGTTAAGCCAACTGGCCCA
TTTCAACTCCAGTGAGGTCAAATATTGTGGTGGTCAACCAAGTCAAGCCACAAAGTACTGTAACATAAC
AGCTGGAGAGTCTTTGAATATCATTCTGGTCTCAGGAAAGGAAACTCAAACCAAGTTTAAATGTCTCCT
GGTAGACGTAAAAGTGAATCACAAAAGAAGAGTCTCACATCATCTGGACCGCATTTCATCAAGGAATTTT
AGGATCCAAATGCATTTGCAGTAGAAAAACAATGGTTATTGAAAATGCAAGAGAGAAAAATTAAGCAA
CAAATCTCTTCAAGAAAACTAGCAGAAAAATAAATAAGTTTTGACTAGTGATAGTAGTGTGCTCAA
GTACCTAAGCAGACAGACAGCAACCCGACAGGCCAGAAACGTCATTGATGAAGTGTAGGCTTCCGA
GTGAAATCCATATGTCTGAAGAAGCCATACAAGATATTTTGGAGCAGACAGAATCAGACCCGCTTTCA
GGCACTCTTTGATCTTTTACTATGGTAAAAACAAGAACAATAAAATATGCCCAAAATCTCTAGTCAA
CCTATGGAGACTAATTCTAATATAGTCTTGCTGAAGAACTAATCTAACAATTAAGTTCTTTTGAAA
CTGAAGAATCAGATGGGAGTCTGGTCAGCCTCCATTTGTACATCCTATCAAAATGAAGATGATTATT
AAATGATTTGAAGAGTGGCAACAGCCATGATGTTCTCCACAGGAATCCAGGAAACTTCTCTCAGATA
AGCTCTAACATTCAAAAAAGACCTTTAAACAGCCATACCTGCTGAACAGAAAGTGTGCCCTTGACATTA
CCCTTGAGTCTGTGCTAACTTGAGTGACTTTAACCAAGAGGAAGCTCTGCTGAATGTAATGAACATTG
TTCTGAGTTATTCGCCAGTCAGATACCCACTGAAGCTGAAGTGGCTGTGGGTGAGAAGAATCTTTGTCT



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GCAGATATACTGAGTCAATCTCAGTATCAGCCTGATCAGCCCAGTGTGCCAGTGACTTCATTTGTGTCTC
TTGGTGGTGAGACCAATGACAAAACTTAGTTCTCTCTGGGAAAAATCCAGCTTTTGTCCCAAAGTAC
TCCACTAACTACAAAGCCATCAAAAAGCCAACCTTTGTGAAATTTCTAACAAATAATAAAAGTTAAACT
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GATTGGTGAAAGTTTGGGTGTAATGTGACTGAGAAAAAGAAATTCATCTTGAAGAACCAGCCCCCTCA
GATAAACAGCTCTCTAATGATGCAGCGTCTGTTGACTTAAATCCTACGGAAGCAAGACGGAGCCACTTC
AGTCTGCCAGTGTCTCAAGAGCCCGAGCCCCCTCTGTGAAAGATGGAGATACTATTTTCTCTCTTTGAG
TGAACATAACAGCTGTGAGAAGTTGCACTGGTCTTGGAGAAGGTAATCCTGTAAAAAATAAATTCG
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ACTCAACAGAGGTAGATGCATCAAGTATTGTCTCTCTCAAAATTATCATTAGTGATGATCCATTTGTTTC
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GGTAAACAACACTCAGAATGAAGATGGCATTGCTTTTTCAGCCAATGTTGCACCATGTGTTCTTAAGGAC
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CCTGTATGACTGATTCAACAGCCTTGGGACCAACTGTCACTCAGTCTAATGTAGTGGTATTGCCTGGGAG
TTCTGCACCTATGACTGCACAGCCTCCTCAACAGCAGTTACAGACACCACCTAAATCTAACAGTGCCTTT
GCTGTACAGCAAGCTGTGTGCGCAAACTTTTACAAGGATCTGCCATCATAATTGCTTCTCCAGTCCAGC
CTGTACTTCAAGGAATGGTGGGAATGATACCTGTGTCTGTAGTTGGACAGAATGGAATACATTCTCTAC
TCCTCCTCAGCAGGTCTTCATATGCCTTTAGCAGCACCTGTTTGTAAAGAGTATCGCTCAGTCCCC
ATTCCTCAAAAAATCCAGAAGGCTCAGGACTCAGAAACAAGCTTATTACAGGAAAAACAGGTAATAATT
TGACAACTTGTCCAGTCTTTCAGAAGCATGTCATACGCAGAGAACTGAAGCTTCTGATAAGAATATAGC
CACTGAACCTTGGGAAAAAATGGAAGACACCACGATTTCCCTCTCAGGAGAGAGGGTAGCTCCTCCAGC
AAGCCATTTGAAAGTCATAGCGGGTGCTTTGTTTCGATAGTACTGTTTCTTCTGTTGCAATACACAGG
GGTCACTGTATAAGATGACCTCCGAAAAACAAGAAAGAAGGAAGCATCTTTTCTCATCTTGACTCACC
CATTCTGTCTCTACCTTAAACACCTCCTAATAACGCCATCAAAAGAGAGAGAGAGAAAAACGTGCC
AAGATTTTATCTAAATCAGAACTGCCTCTAGTCGACACCACTGTGAAAGAAGTTCAGTCTGAAAGA
AAGTTTCCCCACAGAAGTGGCCCTTGAGTCTCTCCATAAAGCAACAGCTAACAGGAGAATGAATTGTG
CGGTGATGGGAAAGGCCGAAGAATGCAGACACCTCAAACTGCCTGGTGGGCAGCAGAATGGGAGCTTG
AGGAACGAAAAAGCCATAGCCTCGCTGCAGGAATTGACCAAAAAACAAGCCACACCTCAACAATAAAA
ATGCCACTTCTGTAGGTGGAAGTGTGAAGGATCAAAAACAAGAGCAGAGTAAACCTGCCAGTTCTTTAAT
TGGGGCAGAAATACTGCAGGATGTTCCCATCCACAGCCAGCCAATAGGAGTGCCGATACTGACTTGCCA
GTACCCCGGACCCCTGGCTCAGGAGCAGGGGAAAAAGCATAAAGAAGAGCCTAGTGACAGTATGAAGGCC
CCGCTAGTAGACGCTGTGGTGAAGAAGGCAGCATGCCAAGAGTAATGATCCCTCTGTCACTGCAGACTT
GCCTGCCTGCAGCCAGCCAGTGAAACAGGCAGTGAAACAGTGTGAGCATGGCTGCCACACGCTCATG
ATTCTCTCAGAGCAGCAATTGCTAGGACTACAGCAACTCCTCTAAAAGATAACACGCAGCAGTTTAGAA
CATCTTCAAGGAGCACTACAAAGAAACGGAAAAATTGAGGAATTAGATGAGTGTGAGAGAACTCCCGCAC
GTCTGGTAAAAATCTTGCTAATTCATCAGTACCAATGAAAAAGAAGAAATCAAGAAAAAGAAGCTACCT
AGTTCATTTCCAGCAGGAATGGATGTGGACAAATCTTGCTCTCATTGCATTATGATGAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_001081152
Insert Size: 4263 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
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_001081152.1 , NP_001074621.1
RefSeq Size:	7347 bp
RefSeq ORF:	4263 bp
Locus ID:	244879
UniProt ID:	Q8BMA5
Cytogenetics:	9 29.12 cM
Gene Summary:	Required for progression through the G1 and S phases of the cell cycle and for S phase entry. Activates transcription of the histone H2A, histone H2B, histone H3 and histone H4 genes in conjunction with MIZF. Also positively regulates the ATM, MIZF and PRKDC promoters. Transcriptional activation may be accomplished at least in part by the recruitment of the NuA4 histone acetyltransferase (HAT) complex to target gene promoters (By similarity). Required for early embryonic development.[UniProtKB/Swiss-Prot Function]