

Product datasheet for MC224120

Npc1 (NM_008720) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Npc1 (NM_008720) Mouse Untagged Clone
Tag: Tag Free
Symbol: Npc1
Synonyms: A430089E03Rik; C85354; D18Ertd139e; D18Ertd723e; lcsd; nmf164; spm
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224120 representing NM_008720
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGTGCGCACCCGGCCCTCGGCCTGCTGCTGCTGCTGCTGCTGCCCTGCGCAGGTGTTTTCGCAAT
 CCTGTGTTTTGGTATGGAGAGTGTGAATTGCGACTGGAGATAAGAGGTACAACCTGTAATATTCTGGCCC
 ACCAAAACCCCTCCAAAGGACGGCTATGACTTAGTGCAGGAACCTGTCCAGGACTCTTCTTTGACAAT
 GTCAGTCTCTGCTGTGACATTCAACAGCTTCAGACGCTGAAGAGTAACCTGCAGCTGCCCTGCAGTTC
 TGCCAGGTGTCCGTCATGTTTTATAACCTAATGACCCTGTTTTGTGAGCTAACATGTAGCCACACCA
 GAGTCAGTTTTCTGAATGTGACAGCAACTGAGGATTATTTTGTATCCTAAGACACAGGAGAATAAAACAAAT
 GTAAGGAATTAGAGTACTTTGTCGGACAGAGCTTCGCGAATGCGATGTACAATGCCTGCCGTGATGTGG
 AGGCGCCTTCCAGTAACGAGAAGGCCTTAGGACTCTTGTGTGGGAGGGATGCCCGTGCCTGCAATGCCAC
 CAACTGGATTGAGTACATGTTCAATAAAGACAACGGACAAGCGCCATTTACCATCATTCTGTGTTTTCA
 GATCTTTCAATCCTTGGGATGGAGCCATGAGAAATGCCACAAAGCTGCAATGAGTCTGTAGATGAGG
 TCACGGGGCCATGTAGCTGCCAGGACTGCCATCGTCTGCGGCCCAAGCCCCAGCCCCACCCCTCC
 TATGCCCTGGAGGATCTGGGGCTTGGATGCCATGTATGTCATCATGTGGGTACCTACGTGGCATTCTG
 TTTGTGTTTTTTGGAGCACTGTTGGCAGTGTGGTGCCACAGAAGCGGTACTTTGTGCTGAGTACTC
 CCATTGACAGTAACATCGCCTTTTCTGTGAATAGCAGTGACAAAGGGGAAGCCTCATGCTGTGACCCACT
 TGGTGCAGCATTGATGACTGTCTGAGGCGCATGTTACAAAAGTGGGGGCTTTCTGTGTCGAAATCCC
 ACCTGCATCATTTTCTTCTCATTGGCCTTCATCACTGTGTGCTCTTCTGGCCTGGTATTTGTCCAGGTCA
 CCACCAATCCTGTAGAGCTCTGGTCAGCCCTCACAGTCAGGCCCGCTTGGAAAAGGAGTACTTTGACAA
 GCACTTTGGGCCCTTTCTTTCGCACGGAGCAGCTTATCATCCAGGCCCAACACCAGTGTTCATATCTAC
 GAACCGTACCCCGCAGGAGCCGATGTGCCCTTCGGGCCTCCATTGAACAAAGAGATTCTGCACCAGTTC
 TGGACTTACAGATCGCCATTGAAAGCATACCCGATCTTACAACAATGAAACCGTACACTGCAGGACAT
 CTGTGTGGCCCCCTCTCTCCATACAACAAGAAGTGCACCATTATGAGTGTGTTAAATTACTTCCAGAAC
 AGCCATGCGGTGCTGGACAGCAAGTAGGCGACGACTTCTATATCTACGCTGATTACCACACACTTTC



[View online »](#)

TG TACTGTGTACGGGCTCCCGCCTCCTTGAATGATACGAGTTTGCTCCACGGTCCTTGCCTGGGTACATT
 TGGAGGACCGGTGTTCCCGTGGCTTGTGTTGGGTGGCTATGATGATCAGAACTACAACAATGCCACCGCG
 CTTGTGATCACCTTCCCGTGAATAATTACTACAATGACACAGAGAGGCTCCAGAGGGCCTGGGCCTGGG
 AGAAAGAGTTTATTAGTTTTGTGAAAACTACAAGAAATCCAAATCTGACCATTTCTTTACTGCTGAGCG
 AAGCATCGAAGATGAGCTCAATCGGGAAGTAACAGTGACGTGTTACCGTCATCATCAGCTACGTCGTG
 ATGTTTTCTGTACATTTCCCTCGCCCTGGGTACATCCAGAGTGCAGCAGGCTCCTGGTGGATTCTAAGA
 TCTCGTGGGCATTGCGGGGATCCTGATCGTGCTAAGCTCGGTGGCCTGCTCTCTGGGCATCTTCAGCTA
 CATGGGGATGCCGCTGACCCTCATCGTCATTGAGGTCATCCCATTCTGGTGTGCTGGCTGTCGGGGTGGAC
 AACATCTTCATTCTAGTGCAGACCTACCAGAGAGATGAGCGTCTTCAGGAGGAAACGCTGGATCAGCAGC
 TGGGCAGGATCCTTGGAGAAGTGGCCCCGACCATGTTCTTTTCATCCTTTTCTGAGACCTCAGCATTTTT
 CTTTGGGCGCTGCTCCTCGATGCCAGCTGTGCACACCTTCTCTGTTTGCGGGAATGGCCGCTCCTCATT
 GACTTCTCCTTCAGATTACCTGCTTGTGAGCCTGTTGGGGTTAGATATTAAGAGGCAAGAGAAAAACC
 ATCTGGACATCCTGTGCTGTGCAGAGGCGCTGACGACGACAAGGTAGCCACGCTCCGAAAGCTACCT
 GTTTCGCTTCTTCAAAACTACTTTGCCCCCTTCTGCTGAAGGACTGGCTGAGGCCAATGTGGTAGCG
 GTGTTTGTGGCGTTCGTGATTCAGTGTGCGGTGGTGAACAAAGTAGACATCGGGTTGGATCAGTCTC
 TCTCAATGCCAAACGATTTCGATGTGATTGACTATTTCAAATCACTCGCTCAGTACTGCACTCGGGCCC
 ACCCGTGTACTTTGCTCCTGGAGGAAGGCTATAACTACAGTTCACGCAAAGGGCAGAACATGGTGTGCGGC
 GGCATGGGCTGTGACAATGACTCCCTGGTGCAGCAGATATTTAACGCAGCTGAGCTGGACACCTACACCC
 GAGTAGGCTTCGCCCCCTCGTCTGGATCGATGACTACTTTGACTGGGTCTCGCCACAGTCGCTCCTGCTG
 CAGACTCTACAACGCTCACTCACCAGTTCGCAATGCTTCTGTGATGGACCAACCTGTGTCCGCTGCAGA
 CCTCTGACTCCAGAGGGTAAACAGAGGCCTCAGGGGAAAGAAATTCATGAAATTCCTGCCCATGTTCTTT
 CTGATAACCCCAACCCCAAGTGGGCAAGGGGGACATGCTGCTTACGGTTCAGCTGTTAACATTGTGGG
 AGATGACACTTACATTGGGGCCACTTACTTCATGACCTACCACACCATACTTAAGACCTCCGCTGACTAT
 ACTGATGCCATGAAGAAAGCTCGGCTAATAGCCAGTAACATCACGGAACCATGCGTTCTAAGGGGAGTG
 ACTACCGGTATTCCCTTACAGTGTGTTCTACGCTTCTATGAACAGTACCTGACCATTATTGATGACAC
 CATCTTTAACCTCAGTGTGCTCTGGGCTCCATATTTCTGGTGACCTTGGTGGTTCTGGGCTGTGAGCTG
 TGGTCTGCGGTGCATGATGTGATCACCATAGCCATGATCCTGGTCAACATGTTCCGGTGCATGTGGCTGT
 GGGGCATCAGTCTGAATGCGGTCTCCTTGGTCAACTTGGTGTGAGCTGCGGCATTTCTGTGGAGTTCTG
 CAGCCATATAACGAGAGCATTACCATGAGTACCAAAGGAAGCCGAGTGAAGCCGGCGGAAGAGGCACTG
 GCCACATGGGTAGTTCTGTATTAGTGAATCACAACCTACGAAATTTGGAGGGATCGTGGTGTAGCCT
 TTGCCAAATCTCAAATTTTTGAGATATTTACTTCAGGATGACTTAGCCATGGTCTTACTCGGAGCCAC
 TCATGGACTAATATTTCTCCCGTCTTACTCAGTTACATAGGGCCGTGGTGAATAAAGCTAAAAGACAC
 ACCACTTACGAGCGCTACAGAGGGACAGAGAGAGAACGGCTCCTCAATTTTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-MluI

ACCN:

NM_008720

Insert Size:

3834 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_008720.2](#), [NP_032746.2](#)

RefSeq Size: 5209 bp

RefSeq ORF: 3834 bp

Locus ID: 18145

UniProt ID: [O35604](#)

Cytogenetics: 18 6.15 cM

Gene Summary: Intracellular cholesterol transporter which acts in concert with NPC2 and plays an important role in the egress of cholesterol from the endosomal/lysosomal compartment (PubMed:21896731, PubMed:22048958, PubMed:27551080). Unesterified cholesterol that has been released from LDLs in the lumen of the late endosomes/lysosomes is transferred by NPC2 to the cholesterol-binding pocket in the N-terminal domain of NPC1. Cholesterol binds to NPC1 with the hydroxyl group buried in the binding pocket (By similarity). May play a role in vesicular trafficking in glia, a process that may be crucial for maintaining the structural and functional integrity of nerve terminals (Probable).[UniProtKB/Swiss-Prot Function]