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Product datasheet for SC120008

Nucleoside phosphorylase (PNP) (NM_000270) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nucleoside phosphorylase (PNP) (NM_000270) Human Untagged Clone
Tag:	Tag Free
Symbol:	Nucleoside phosphorylase
Synonyms:	NP; PRO1837; PUNP
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC120008 sequence for NM_000270 edited (data generated by NextGen Sequencing)

ATGGAGAACGGATACACCTATGAAGATTATAAGAACACTGCAGAATGGCTTCTGTCTCAC
ACTAAGCACCGACCTCAAGTTGCAATAATCTGTGGTTCTGGATTAGGAGGTCTGACTGAT
AAATTAACTCAGGCCCAGATCTTTGACTACGGTGAAATCCCCAACTTTCCCCGAAGTACA
GTGCCAGGTCATGCTGGCCGACTGGTGTTTGGGTTCCTGAATGGCAGGGCCTGTGTGATG
ATGCAGGGCAGGTTCCACATGTATGAAGGGTACCCACTCTGGAAGGTGACATTCCCAGTG
AGGGTTTTCCACCTTCTGGGTGTGGACACCCTGGTAGTCACCAATGCAGCAGGAGGGCTG
AACCCCAAGTTTGAGGTTGGAGATATCATGCTGATCCGTGACCATATCAACCTACCTGGT
TTCAGTGGTCAGAACCCTCTCAGAGGGCCCAATGATGAAAGGTTTGGAGATCGTTTCCCT
GCCATGTCTGATGCCTACGACCGGACTATGAGGCAGAGGGCTCTCAGTACCTGGAAACAA
ATGGGGGAGCAACGTGAGCTACAGGAAGGCACCTATGTGATGGTGGCAGGCCCCAGCTTT
GAGACTGTGGCAGAATGTCGTGTGCTGCAGAAGCTGGGAGCAGACGCTGTTGGCATGAGT
ACAGTACCAGAAGTTATCGTTGCACGGCACTGTGGACTTCGAGTCTTTGGCTTCTCACTC
ATCACTAACAAGGTCATCATGGATTATGAAAGCCTGGAGAAGGCCAACCATGAAGAAGTC
TTAGCAGCTGGCAAACAAGCTGCACAGAAATTGGAACAGTTTGTCTCCATTCTTATGGCC
AGCATTCCACTCCCTGACAAAGCCAGTTGA

Clone variation with respect to NM_000270.3

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000270 unedited
TTGTAACACGACTTTACTATANNGGCGGCCGCGNAATTCGGCACGAGGGACCCGGCAGCC
TTGCTCAGTTCAGCATAGCGGAGCGGATCCGATCGGATCGGAGCGGATCGGAGCACACCG
GAGCAGGCTCATCGAGAAGGCGTCTGCGAGACCATGGAGAACGGATACACCTATGAAGAT
TATAAGAACACTGCAGAATGGCTTCTGTCTCACACTAAGCACCGACCTCAAGTTGCAATA
ATCTGTGGTTCTGGATTAGGAGGTCTGACTGATAAATTAACTCAGGCCCAGATCTTTGAC
TACGGTGAAATCCCCAACTTTCCCCGAAGTACAGTGCCAGGTCATGCTGGCCGACTGGTG
TTTGGGTTCCTGAATGGCAGGGCCTGTGTGATGATGCAGGGCAGGTTCCACATGTATGAA
GGGTACCCACTCTGGAAGGTGACATTCCCAGTGAGGGTTTTCCACCTTCTGGGTGTGGAC
ACCCTGGTAGTCACCAATGCAGCAGGAGGGCTGAACCCCAAGTTTGAGGTTGGAGATATC
ATGCTGATCCGTGACCATATCAACCTACCTGGTTTCAGTGGTCAGAACCCTCTCAGAGGG
CCCAATGATGAAAGGTTTGGAGATCGTTTCCCTGCCATGTCTGATGCCTACGACCGGACT
ATGAGGCAGAGGGCTCTCAGTACCTGGAAACAAATGGGGGAGCAACGTGAGCTACANGGA
AGCACCTATGTGATGGTGGCAGGCCCCAGCTTTGAGACTGTGGCAGAATGTCGTGTGCTG
CAAAAGCTGGGAGCAGACGCTGTTGGCATGAGTACAGTACCAGAAGTTATCCGTGCACGG
CACTGTGGACCTCCAGTCTTTGGCCNCTCACTCATCACTAACAAGGGCTCATGGAT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000270 unedited
TTTTATGCCACGCGGCCCGCAATCTAATATCGAGTTTTTTTTTTTTTTTTTATTTCATC
TTTCTCTTTATCCTGACAACATTATGACATTCAATAAAATCCAAGAGGTATTGGATTACC
CCCTTGCTTGGTCCCTGGTGATTTACATCCGGTACAACTGATCCTCTCCGAACGTATTAT
TTCTAAGAGCTAGCACCAGCTGCTATGCAAAGCTCTAAGGGCCGAGCCAAATCCTGGGCA
TCTCCACAGCATGTGCGGCAGGGCACGCGCCTTAGTTCTCGTGTAAGAAAGACCAGGAAC
GAGAACAGCTTTATTCCGTACCGCTAATGTTCTTCTATGCTCACACTTGTTCTTCTAGCT
TTGAGACAAGGACCCGGCCCCCCCTCGTCTTGCCATAAGACCGTGGGAAAGGCGAACGCA
ATGACACCTCTCCTTTCTGCTCCACCTATTCCCCCACGCCTCGCACTCTTCTTCGCGCCC
TAGACCGCCGCACCTTCCCGGTTCCCTGCGTGTATACGCCTCACTATCCCTTCGTTTCCC
TTTTGATCTCCCATGCCGGCCACCCCCTCCCCACACGTGCACCCTTTGTCCCCATCCTGT
CGCTCTGTTCCGCCATCGTCATACTTCTCCTGTTTGACCTTCCCCTCGTCCCCCCTCCTT
TTCCATCTTCTTTCCCCCCTTACTTCCCCCACTTTCCCTTCTCCCGCCCTCCATACTCCT
CCGTCCCCCTTCCTTTCCCCCCTTCCCCCCCTTTTTCCGCCTCCTTTTTTCCCCCCCTTT
TTTCCCCGCGTTCCGCTTCCTCTCTTCCCCCTTTTTAACTCCCCCCTCTTTTTTCTTTCC
ATACAGAGTATCCCTCCTCCTCCCCGTTCTTCCCTCTATTTCCGACTACTATTCCCCCCC
CATCTCT

Restriction Sites: NotI-NotI

ACCN: NM_000270

Insert Size: 1530 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_000270.1, NP_000261.1
RefSeq Size:	1418 bp
RefSeq ORF:	870 bp
Locus ID:	4860
UniProt ID:	P00491
Cytogenetics:	14q11.2
Domains:	Mtap_PNP
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Metabolic pathways, Nicotinate and nicotinamide metabolism, Purine metabolism, Pyrimidine metabolism
Gene Summary:	This gene encodes an enzyme which reversibly catalyzes the phosphorolysis of purine nucleosides. The enzyme is trimeric, containing three identical subunits. Mutations which result in nucleoside phosphorylase deficiency result in defective T-cell (cell-mediated) immunity but can also affect B-cell immunity and antibody responses. Neurologic disorders may also be apparent in patients with immune defects. A known polymorphism at aa position 51 that does not affect enzyme activity has been described. A pseudogene has been identified on chromosome 2. [provided by RefSeq, Jul 2008]