

Product datasheet for **RC229270**

PAX1 (NM_006192) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAX1 (NM_006192) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAX1
Synonyms:	HUP48; OFC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC229270 representing NM_006192
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGTTCAACCTGGGCTGGGGTTCGGGGCGTGGAGAGTGTCTGGGAGGGGGCAGCAGCGGGCGCGG
 CAGGCCCTGGAGCGGGCGCAGCGCGCTCCGCTGCCGCGCACAGCGCGTCTCCAGCCCGCGCTGGGCCG
 CCGCGGCTCTCGGCTCTCGGGCGCCCTCCCTCTATGCCTCTCACGCGGGCGGGCGGCCAAGCTCTC
 CCGGACTGCGCCGGGCCAGCCCGGCCACCCGGCCACCCGGCGCCAGGCAGCTGGCCGGCCCGCTCG
 CTATGGAGCAGACGTATGGCAGGTGAACCAGCTGGGCGGTGTGTTGTCGAACGGCCGCCCTGCCAA
 CGCCATCCGTTGCGCATTGTGGAGCTGGCGCAGCTGGGCATCCGACCCTGTGACATCAGTCGGCAGCTC
 CGCGTATCCACGGCTGCGTGAGCAAGATCCTGGCGCGCTACAACGAGACCGGCTCCATTCTGCCGGGG
 CCATCGGGGGGAGCAAGCCCGCGTCAACTCCCAACGTGGTCAAGCACATCCGGGACTACAAGCAAGG
 AGACCCTGGCATCTTTGCTGGGAGATCCGCGACCGGCTGCTGGCCGACGGCGTCTGTGACAAGTACAAT
 GTGCCTTCGGTGAGCTCCATCAGCCGCATCCTGCGCAACAAGATCGGCAGCCTGGCGCAGCCCGGACCGT
 ACGAGGCAAGTAAGCAGCCCGCTCGCAGCCTACGCTGCCCTACAACCACATCTACCAGTACCCCTACCC
 CAGTCCCGTGTGCCCCACGGGCGCAAGATGGGCAGCCACCCGGGGTCCCGGGCACGGCGGGCCACGTC
 AGCATCCCGCGCTCATGGCCCTCGGCACACTCGGTGAGCAACATCCTGGGCATCCGGACGTTTATGGAGC
 AAACAGGGGCCCTGGCTGGGAGCGAAGGCACCGCTTACTCTCCAAGATGGAAGACTGGGCCGGCGTGAA
 CCGCACGGCTTCCCCGCCACCCCGCAGTGAATGGGCTAGAGAACTGCCTTAGAGGCAGACATTA
 TACTCAGTCGGCTCCACCTCTCTGCCGTGGCGGCTTCTCCCCGCTGCGCTACCCGGCCCTCA
 ACCAGCACGGCGGTACAGCGCCCGGGCGGGCTACCTCGCCCGGGCCCGCTGGCCGCTGCGCA
 AGGTCCTCTCTGGCGCCCCCGGGCGCGTAGCTGTGCATGGCGGGAACTCGCGGCAGCAATGACC
 TTCAAGCATCCCAGCCGAGAAGGAAGCCTCCAGCTCCGCGCAGCAAGGCCCGGACGCCCTCAGTAGCTT
 ACACGGACTGCCATCCCGGCTCGACCTCCTAGGGCAGCTCTCCCGGACCCGAGCCCGGAGGGAACG
 GCAGGGGACCCGGGCGCACAGGTCTGCGCGGGCCCGGCAATCGGCACGGGCAGGATCGGAGGACTC
 GCGGAGGAGGAAGCCAGTCCCGGCCCGGGGTGCACGCCAGCCAGCCCGGAGCCAGCCCTGCCTCT
 GGCCGGACCCACCACACTTCTTTATTGGTCTGGGTTTTAGGCTTCTCTGAACCTGGGTTT

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC229270 representing NM_006192
 Red=Cloning site Green=Tags(s)

MKFTLGLGSRWRVSWEGAAAAAAGPGAGGSALRCRAQRVSSPRLGRRGSRLSGALPLCLSRGGGAQAL
 PDCAGPSPGHPGHPGARQLAGPLAMEQTYGEVNQLGGVFVNGRPLPNAIRLRIVELAQGLIRPCDISRQL
 RVSHGCVSKILARYNETGSILPGAIGGSKPRVTPPNVVKHIRDYKQDPIFAWEIRDRLADGVCDKYN
 VPSVSSISRILRNKIGSLAQPGPYEASKQPPSQPTLPYNHIYQYPYSPVSPTGAKMGSHPGVPGTAGHV
 SIPRWSAHSVSNILGIRTFMEQTGALAGSEGTAYSPKMEDWAGVNRTAFPATPAVNGLEKPALEADIK
 YTQASTLSAVGGFLPACAYPASNQHGVSAPGGGYLAPGPPWPAQGPPLAPPAGVAVHGGELAAAMT
 FKHPSREGSLPAPAARPTPSVAYTDCPSRPRPPRGSSPRTRRERQADPGAQVCAAAPAIGTGRIGGL
 AEEEASAGPRGARPASPQAQPCLPDPHFLYWSGFLGFSELGF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8066_a03.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_006192

ORF Size: 1602 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](#)

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).

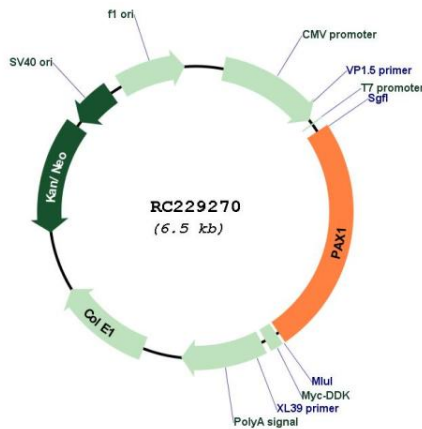
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_006192.5](#)

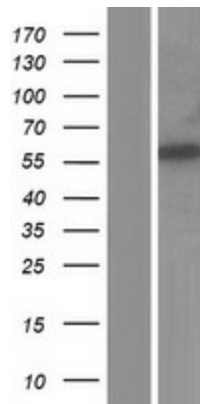
RefSeq ORF: 1605 bp
 Locus ID: 5075
 UniProt ID: [P15863](#)
 Cytogenetics: 20p11.22
 MW: 55.3 kDa

Gene Summary: This gene is a member of the paired box (PAX) family of transcription factors. Members of the PAX family typically contain a paired box domain and a paired-type homeodomain. These genes play critical roles during fetal development. This gene plays a role in pattern formation during embryogenesis and may be essential for development of the vertebral column. This gene is silenced by methylation in ovarian and cervical cancers and may be a tumor suppressor gene. Mutations in this gene are also associated with vertebral malformations. [provided by RefSeq, Mar 2012]

Product images:



Circular map for RC229270



Western blot validation of overexpression lysate (Cat# [LY432289]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229270 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).