

## Product datasheet for RC210370

### PAX4 (NM\_006193) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | PAX4 (NM_006193) Human Tagged ORF Clone                           |
| Tag:                      | Myc-DDK   |
| Symbol:                   | PAX4  |
| Synonyms:                 | KPD; MODY9  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| ORF Nucleotide Sequence:  | >RC210370 ORF sequence<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAACCAGCTTGGGGGCTCTTTGTGAATGGCCGGCCCTGCCTCTGGATACCCGGCAGCAGATTGTGC  
GGCTAGCAGTCAGTGAATGCGGCCCTGTGACATCTCACGGATCCTTAAGGTATCTAATGGCTGTGTGAG  
CAAGATCCTAGGGCGTTACTACCGCACAGGTGTCTTGAGCCAAAGGGCATTGGGGGAAGCAAGCCACGG  
CTGGCTACACCCCTGTGGTGGCTCGAATTGCCAGCTGAAGGGTGAGTGTCCAGCCCTCTTTCCTGGG  
AAATCCAACGCCAGCTTTGTGCTGAAGGGCTTTGCACCCAGGACAAGACTCCCAGTGTCTCCTCCATCAA  
CCGAGTCTCGCGGCATTACAGGAGGACCAGGGACTACCGTGCACACGGCTCAGGTCACCGAGCTGTTTTG  
GCTCCAGCTGTCCCTCACTCCCCATAGTGGCTCTGAGACTCCCGGGGTACCCACCCAGGGACCGGCCACC  
GGAATCGGACTATCTTCTCCCAAGCCAGGCAGAGGCACTGGAGAAAGAGTTCAGCGTGGGCAGTATCC  
TGATTAGTGGCCCGTGGAAAGCTGGCTACTGCCACCTCTCTGCCTGAGGACACGGTGAGGGTCTGGTTT  
TCCAACAGAAGAGCCAAATGGCGTCGGCAAGAGAAGCTCAAGTGGGAAATGCAGCTGCCAGGTGCTTCCC  
AGGGGCTGACTGTACCAAGGTTGCCCCAGGAATCATCTCTGCACAGCAGTCCCCTGGCAGTGTGCCAC  
AGCAGCCCTGCCTGCCCTGGAACCACTGGTCCCTCCTGCTATCAGCTGTGCTGGGCAACAGCACCAGAA  
AGGTGTCTGAGTGACACCCACCTAAAGCCTGTCTCAAGCCCTGTGGGGCCACTTGCCCCACAGCCGA  
ATTCCCTGGACTCAGGACTGCTTTGCCTTCTTGCCTTCCCTCCACTGTCCCCTGGCCAGTCTTAGTGG  
CTCTCAGGCCCTGCTCTGGCCTGGCTGCCACTACTGTATGGCTTGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC210370 protein sequence  
Red=Cloning site Green=Tags(s)

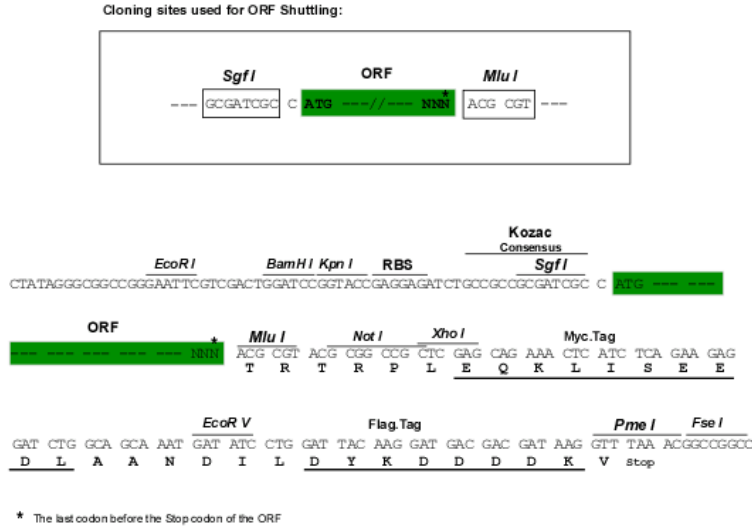
MNQLGGLFVNGRPLPLDTRQQIVRLAVSGMRPCDISRILKVSNGCVSKILGRYYRTGVLEPKGIGGSKPR  
 LATPPVVARIAQLKGCEPALFAWEIQRQLCAEGLCTQDKTPSVSSINRVLRALQEDQGLPCTRLRSPAVL  
 APAVLTPHSGSETPRGTHPGTGHRNRTIFSPSQAEALEKEFQRGQYPDSVARGKLATATSLPEDTVRVWF  
 SNRRAKWRRQEKLKWEMQLPGASQGLTVPRVAPGIIISAQQSPGSVPTAALPALEPLGPSCYQLCWATAPE  
 RCLSDTPPKACLKPCWGHLPQPNSLDSGLLCLPCSSHCLASLSGSQALLWPGCPALLYGLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6006\\_d11.zip](https://cdn.origene.com/chromatograms/mk6006_d11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006193

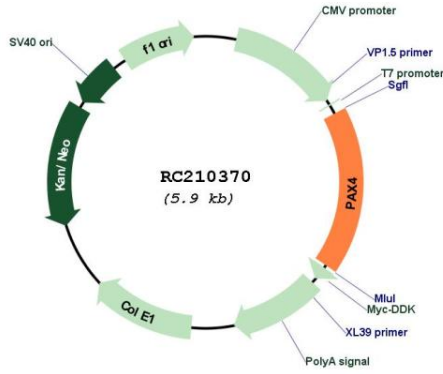
**ORF Size:** 1029 bp

**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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

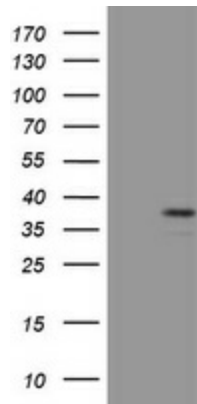
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

|                               |   |
|-------------------------------|---|
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.  |
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol> |
| <b>RefSeq:</b>                | <a href="#">NM_006193.2</a>   |
| <b>RefSeq Size:</b>           | 2010 bp   |
| <b>RefSeq ORF:</b>            | 1032 bp   |
| <b>Locus ID:</b>              | 5078  |
| <b>UniProt ID:</b>            | <a href="#">O43316</a>  |
| <b>Cytogenetics:</b>          | 7q32.1  |
| <b>Protein Families:</b>      | Embryonic stem cells, ES Cell Differentiation/IPS, Transcription Factors  |
| <b>Protein Pathways:</b>      | Maturity onset diabetes of the young  |
| <b>MW:</b>                    | 37 kDa  |
| <b>Gene Summary:</b>          | This gene is a member of the paired box (PAX) family of transcription factors. Members of this gene family typically contain a paired box domain, an octapeptide, and a paired-type homeodomain. These genes play critical roles during fetal development and cancer growth. The paired box 4 gene is involved in pancreatic islet development and mouse studies have demonstrated a role for this gene in differentiation of insulin-producing beta cells. [provided by RefSeq, Jul 2008]                        |

Product images:



Circular map for RC210370



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PAX4 (Cat# RC210370, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PAX4 (Cat# [TA801976]).