

## Product datasheet for RC212615

### PAX3 (NM\_013942) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PAX3 (NM\_013942) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PAX3  
**Synonyms:** CDHS; HUP2; WS1; WS3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC212615 representing NM\_013942  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGACCACGCTGGCCGGCCTGTGCCAGGATGATGCGGCCGGGCCGGGGCAGAACTACCCGCTAGCG  
 GGTTCGCCGCTGGAAGTGTCCACTCCCCTCGGCCAGGGCCGCTCAACCAGCTCGGCGGTGTTTTATCAA  
 CGGCAGGCCGCTGCCAACCACATCCGCCACAAGATCGTGGAGATGGCCACCACGGCATCCGGCCCTGC  
 GTCATCTCGGCCAGCTGCGCGTGTCCACGGTGCCTCCAAGATCCTGTGCAGGTACCAGGAGACTG  
 GCTCCATACGTCTGGTCCATCGCGCGCAGCAAGCCCAAGCAGGTGACAACGCCTGACGTGGAGAAGAA  
 AATTGAGGAATACAAAAGAGAGAACCCGGGCATGTTCACTGGGAAATCCGAGACAAATTAAGGAC  
 GCGGTCTGTGATCGAAACACCGTGCCGTGAGTTCATCAGCCGCATCCTGAGAAGTAAATTCGGGA  
 AAGGTGAAGAGGAGGAGGCCGACTTGGAGAGGAAGGAGGCAGAGGAAAGCGAGAAGAAGGCCAAACACAG  
 CATCGACGGCATCCTGAGCGAGCGAGGAAAGGCCCTGGTCTCCGGAGTTTCTCGCAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC212615 representing NM\_013942  
 Red=Cloning site Green=Tags(s)

MTTLGAVPRMMRPGPGQNYPRSGFPLEVSTPLGQGRVNLGGVFINGRPLPNHIRHKIVEMAHHGIRPC  
 VISRQLRVSHGCVSKILCRYQETGSIIRPGAIGGSKPKQVTTDPVEKKIEEYKRENPGMFSWEIRDKLLKD  
 AVCDRNTVPSVSSISRILRSKFGKGEIEEADLERKEAEESEKKAKHSIDGILSERGKALVSGVSSH

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_013942

ORF Size: 618 bp

OTI Disclaimer: 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\\_013942.5](#)

RefSeq Size: 1095 bp

RefSeq ORF: 621 bp

Locus ID: 5077

UniProt ID: [P23760](#)

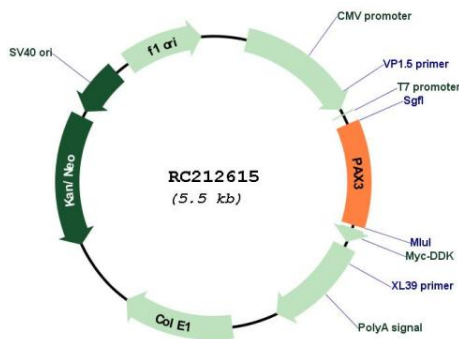
**Cytogenetics:** 2q36.1

**Protein Families:** Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Transcription Factors

**MW:** 22.7 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. Mutations in paired box gene 3 are associated with Waardenburg syndrome, craniofacial-deafness-hand syndrome, and alveolar rhabdomyosarcoma. The translocation t(2;13)(q35;q14), which represents a fusion between PAX3 and the forkhead gene, is a frequent finding in alveolar rhabdomyosarcoma. Alternative splicing results in transcripts encoding isoforms with different C-termini. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC212615