

## Product datasheet for **SC309539**

### PAX3 (NM\_181461) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PAX3 (NM_181461) Human Untagged Clone
Tag:	Tag Free
Symbol:	PAX3
Synonyms:	CDHS; HUP2; WS1; WS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309539 representing NM_181461. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGACCACGCTGGCCGGCGCTGTGCCAGGATGATGCGGCCGGGCCGGGGCAGAACTACCCGCGTAGC
GGGTTCCCGCTGGAAGTGTCCACTCCCCTCGGCCAGGGCCGCGTCAACCAGCTCGCGGTGTTTTATC
AACGGCAGGCCGCTGCCAACACATCCGCCACAAGATCGTGGAGATGGCCACCACGGCATCCGGCCC
TGCGTCATCTCGCGCCAGCTGCGCGTGTCCACGGCTGCGTCTCCAAGATCCTGTGCAGGTACCAGGAG
ACTGGCTCCATACGTCTGGTGCATCGGCCGAGCAAGCCCAAGCAGGTGACAACGCCTGACGTGGAG
AAGAAAATTGAGGAATACAAAAGAGAGAACCCGGGCATGTT CAGCTGGGAAATCCGAGACAAATTA
AAGGACGCGGTCTGTGATCGAAACACCGTGCCGT CAGTGAGTTCCATCAGCCGCATCCTGAGAAGTAAA
TTCGGGAAAGGTGAAGAGGAGGAGGCCGACTTGAGAGGAAGGAGGCAGAGGAAAGCGAGAAGAAGGCC
AAACACAGCATCGACGGCATCCTGAGCGAGCGAGCCTCAGCACCCCAATCAGATGAAGGCTCTGATATT
GACTCTGAACCAGATTTACCACTAAAGAGGAAACAGCGCAGAAGCCGAACCACCTTACAGCAGAACAG
CTGGAGGAAGTGGAGCGTGTCTTTGAGAGAAGTACCTGACATTTATACTAGGGAGGAAGTGGCC
CAGAGGGCGAAGCTCACCGAGGCCGAGTACAGGTCTGGTTTAGCAACCGCCGTGCAAGATGGAGGAAG
CAAGCTGGGGCCAATCAACTGATGGCTTTCAACCATCTCATTCCCGGGGGGTTCCCTCCCCTGCCATG
CCGACCTTGCCAACGTACCAGCTGTGAGAGACCTTACCAGCCACATCTATCCCAAGCTGTGTCA
GATCCCAGCAGCACCGTTACAGACCTCAACCGCTTCTCCAAGCACTGTACACCAAGCAGCATTCT
TCCAACCCAGACAGCAGCTCTGCCTACTGCCTCCCAGCACCAGGCATGGATTTTCCAGCTATACAGAC
AGCTTTGTGCCTCCGTCGGGGCCCTCCAACCCATGAACCCACCATTGGCAATGGCCTCTCACCTCAG
GTGCCTTTCATTATCTCAAGCCAGATATCGCGTAAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: Sgfl-Mlul



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Plasmid Map:	□
ACCN:	NM_181461
Insert Size:	1212 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<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>
RefSeq:	<a href="#">NM_181461.3</a>
RefSeq Size:	3112 bp
RefSeq ORF:	1212 bp
Locus ID:	5077
UniProt ID:	<a href="#">P23760</a>
Cytogenetics:	2q36.1
Protein Families:	Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Transcription Factors
MW:	44.8 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]

Transcript Variant: This variant (PAX3G) differs in the 3' UTR, and contains an alternate splice pattern in the 3' coding region, compared to variant PAX3. The resulting protein (isoform PAX3g) is shorter and has a distinct C-terminus, compared to variant PAX3. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.