

## Product datasheet for **SC304450**

### PAX5 (NM\_016734) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PAX5 (NM\_016734) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** PAX5  
**Synonyms:** ALL3; BSAP  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_016734 edited  
 ATGGATTTAGAGAAAAATTATCCGACTCCTCGGACCAGCAGGACATGGAGGAGTG  
 AATCAGCTTGGGGGGTTTTTGTGAATGGACGGCCACTCCCGGATGTAGTCCGCCAGAGG  
 ATAGTGGAACTTGCTCATCAAGGTGTCAGGCCCTGCGACATCTCCAGGCAGCTTCGGGTC  
 AGCCATGTTGTGTCAGCAAAATCTTGGCAGGTATTATGAGACAGGAAGCATCAAGCCT  
 GGGTAATTGGAGGATCCAAACCAAGGTGCGCACACCAAAAGTGGTGGAAAAAATCGCT  
 GAATATAAACGCCAAAATCCCACCATGTTTGCCTGGGAGATCAGGGACCGGCTGTGGCA  
 GAGCGGTGTGTGACAATGACACCGTGCCTAGCGTCAGTTCATCAACAGGATCATCCGG  
 ACAAAGTACAGCAGCCACCAACCAACCAGTCCCAGCTCCAGTCACAGCATAGTGTC  
 ACTGGCTCCGTGACGCAGGTGCTCCTCGGTGAGCACGGATTCCGGCCGGCTCGTCTACTCC  
 ATCAGCGGCATCCTGGGCATCACGTCCCCAGCGCCGACACCAACAAGCGCAAGAGAGAC  
 GAAGGTATTAGGAGTCTCCGGTGCCGAACGGCCACTCGCTTCCGGGCAGAGACTTCCTC  
 CGGAAGCAGATGCGGGGAGACTTGTTCACACAGCAGCAGCTGGAGGTGCTGGACCGCGTG  
 TTTGAGAGGCAGCACTACTCAGACATCTTACCACCACAGAGCCCATCAAGCCCGAGCAG  
 ACCACAGAGTATTCAGCCATGGCCTCGCTGGCTGGTGGGCTGGACGACATGAAGGCCAAT  
 CTGGCCAGCCCCACCCCTGCTGACATCGGGAGCAGTGTGCCAGGCCCGCAGTCTACCCC  
 ATTTGTGACAGGCCGTGACTTGGCGAGCAGACCCTCCCCGGGTACCCTCCACACGTCCCC  
 CCCGCTGGACAGGGCAGTACTCAGCACCGACGCTGACAGGGATGGTGCCTGGGAGTGAG  
 TTTTCCGGGAGTCCCTACAGCCACCCCTCAGTATTCTCGTACAACGACTCCTGGAGGTTCC  
 CCCAACCCGGGGCTGCTTGGCTCCCCCTATTATTATAGCGCTGCCGCCGAGGAGCCGCC  
 CCACCTGCAGCCGCCACTGCCTATGACCGTCACTGA

**Restriction Sites:** Please inquire  
**ACCN:** NM\_016734  
**Insert Size:** 1700 bp



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**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](#)

**OTI Annotation:** This clone has been fully sequenced and found one SNP within the protein associated with this reference, NM\_016734.1.

**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\\_016734.1](#), [NP\\_057953.1](#)

**RefSeq Size:** 3650 bp

**RefSeq ORF:** 1176 bp

**Locus ID:** 5079

**UniProt ID:** [Q02548](#)

**Cytogenetics:** 9p13.2

**Protein Families:** Transcription Factors

**Gene Summary:**

This gene encodes a member of the paired box (PAX) family of transcription factors. The central feature of this gene family is a novel, highly conserved DNA-binding motif, known as the paired box. Paired box transcription factors are important regulators in early development, and alterations in the expression of their genes are thought to contribute to neoplastic transformation. This gene encodes the B-cell lineage specific activator protein that is expressed at early, but not late stages of B-cell differentiation. Its expression has also been detected in developing CNS and testis and so the encoded protein may also play a role in neural development and spermatogenesis. This gene is located at 9p13, which is involved in t(9;14)(p13;q32) translocations recurring in small lymphocytic lymphomas of the plasmacytoid subtype, and in derived large-cell lymphomas. This translocation brings the potent E-mu enhancer of the IgH gene into close proximity of the PAX5 promoter, suggesting that the deregulation of transcription of this gene contributes to the pathogenesis of these lymphomas. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2013]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). 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.