

## Product datasheet for SC304021

### PAX8 (NM\_013953) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PAX8 (NM_013953) Human Untagged Clone
Tag:	Tag Free
Symbol:	PAX8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC304021 representing NM_013953. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG  
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC  
ATGCCCTACAACCTCCATCAGATCTGGCCATGGAGGGCTGAACCAGCTGGGAGGGGCTTTGTGAATGGC  
AGACCTCTGCCGGAAGTGGTCCGCCAGCGCATCGTAGACCTGGCCACCAGGGTGTAAAGGCCCTGCGAC  
ATCTCTCGCCAGCTCCGCGTCAGCCATGGCTGCGTCAGCAAGATCCTTGGCAGGTAACGAGACTGGC  
AGCATCCGGCTGGAGTGATAGGGGGCTCCAAGCCCAAGGTGGCCACCCCAAGGTGGTGGAGAAGATT  
GGGGACTACAAACGCCAGAACCCTACCATGTTTGCCTGGGAGATCCGAGACCCGCTCCTGGCTGAGGGC  
GTCTGTGACAATGACACTGTGCCAGTGTCCAGTCCATTAATAGAATCATCCGGACCAAAGTGCAGCAA  
CCATTCAACCTCCCTATGGACAGCTGCGTGGCCACCAAGTCCCTGAGTCCCGGACACACGCTGATCCCC  
AGCTCAGCTGTAACCTCCCCGGAGTCACCCAGTCCGATTCCCTGGGCTCCACCTACTCCATCAATGGG  
CTCCTGGGCATCGCTCAGCCTGGCAGCGACAAGAGGAAAATGGATGACAGTGATCAGGATAGCTGCCGA  
CTAAGCATTGACTCACAGAGCAGCAGCAGCGGACCCCGAAAGCACCTTCGCACGGATGCCTTCAGCCAG  
CACCACCTCGAGCCGCTCGAGTGCCATTTGAGCGGCAGCACTACCCAGAGGCCTATGCCTCCCCCAGC  
CACACCAAAGGCGAGCAGGGCGAGAGATGGTGGGGCCACGCTGCCCGGATACCCACCCACATCCCCA  
CCAGCGGACAGGGCAGCTATGCCTCCTCTGCCATCGCAGGCATGGTGGCAGGAAGTGAATACTCTGGCA  
ATGCCTATGGCCACACCCCTACTCCTCTACAGCGAGGCTGGCGCTTCCCCAACTCCAGTTGCTGA

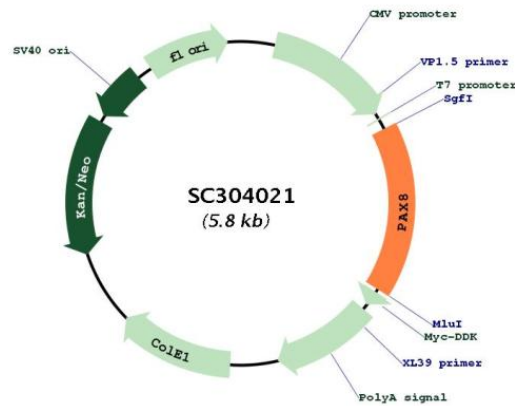
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT  
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI



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## Plasmid Map:



ACCN: NM\_013953

Insert Size: 966 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:

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\\_013953.3](#)

RefSeq Size: 3755 bp

RefSeq ORF: 966 bp

<b>Locus ID:</b>	7849
<b>UniProt ID:</b>	<a href="#">Q06710</a>
<b>Cytogenetics:</b>	2q14.1
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Pathways in cancer, Thyroid cancer
<b>MW:</b>	34.9 kDa
<b>Gene Summary:</b>	<p>This gene encodes a member of the paired box (PAX) family of transcription factors. Members of this gene family typically encode proteins that contain a paired box domain, an octapeptide, and a paired-type homeodomain. This nuclear protein is involved in thyroid follicular cell development and expression of thyroid-specific genes. Mutations in this gene have been associated with thyroid dysgenesis, thyroid follicular carcinomas and atypical follicular thyroid adenomas. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Mar 2010]</p> <p>Transcript Variant: This variant (PAX8D) lacks two alternate exons, compared to variant PAX8A, that results in a frameshift and an early stop codon. The encoded isoform (PAX8D) is shorter and has a distinct C-terminus compared to isoform PAX8A.</p>