

Product datasheet for **RC200651**

PAX8 (NM_003466) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAX8 (NM_003466) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAX8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200651 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCCTCACAACTCCATCAGATCTGGCCATGGAGGGCTGAACCAGCTGGGAGGGCCTTTGTGAATGGCA
 GACCTCTGCCGGAAGTGGTCCGCCAGCGCATCGTAGACCTGGCCACCAGGGTGTAAAGCCCTGCGACAT
 CTCTCGCCAGCTCCGCGTCAGCCATGGCTGCGTCAGCAAGATCCTTGGCAGGTAACGAGACTGGCAGC
 ATCCGGCCTGGAGTGATAGGGGGCTCCAAGCCCAAGGTGGCCACCCCAAGGTGGTGGAGAAGATTGGGG
 ACTACAAACGCCAGAACCCTACCATGTTTGCCTGGGAGATCCGAGACCGGCTCCTGGCTGAGGGCGTCTG
 TGACAATGACTGTGCCAGTGTGAGTCCATTAATAGAATCATCCGGACCAAAGTGCAGCAACCATT
 AACCTCCCTATGGACAGCTGCGTGGCCACCAAGTCCCTGAGTCCCGGACACACGCTGATCCCCAGCTCAG
 CTGTAACCTCCCGGAGTACCCAGTCGGATTCCCTGGGCTCCACCTACTCCATCAATGGGCTCCTGGG
 CATCGCTCAGCCTGGCAGCGACAAGAGGAAAATGGATGACAGTGTGAGGATAGCTGCCGACTAAGCATT
 GACTCACAGAGCAGCAGCAGCGGACCCCGAAAGCACCTTCGCACGGATGCCTTCAGCCAGCACCACCTCG
 AGCCGCTCGAGTGCCTTTGAGCGGCAGCACTACCCAGAGGCCTATGCCTCCCCAGCCACACCAAAGG
 CGAGCAGGGCCTTACCCGCTGCCCTTGCTCAACAGCACCTGGACGACGGGAAGGCCACCCCTGACCCCT
 TCCAACACGCCACTGGGGCGCAACCTCTCGACTCACCAGACCTACCCCGTGGTGGCAGATCCTCACTCAC
 CCTTCGCCATAAAGCAGGAAACCCCGAGGTGTCCAGTTCTAGCTCCACCCCTTCTCTTTATCTAGCTC
 CGCCTTTTGGATCTGCAGCAAGTGGCTCCGGGGTCCCGCCTTCAATGCCTTTCCCATGCTGCCTCC
 GTGTACGGGCAGTTCACGGGCCAGGCCCTCCTCTCAGGGCAGAGATGGTGGGGCCACGCTGCCCGGAT
 ACCCACCACATCCCCACCAGCGGACAGGGCAGCTATGCCTCCTGCCATCGCAGGCATGGTGGCAGG
 AAGTGAATACTCTGGCAATGCCTATGGCCACACCCCTACTCCTCTACAGCGAGGCCTGGCGCTTCCCC
 AACTCCAGCTTGCTGAGTCCCATATTATTACAGTTCACATCAAGGCCGAGTGCACCGCCACCCTG
 CCACGGCCTTTGACCATCTG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200651 protein sequence
 Red=Cloning site Green=Tags(s)

MPHNSIRSGHGLNQLGGAFVNGRPLPEVVRQRIVDLAHQGVRPCDISRQLRVSHGCVSKILGRYYETGS
 IRPGVIGGSKPKVATPKVVEKIGDYKRQNPMTFAWEIRDRLAEGVCDNDTVPSVSSINRIIRTKVQPPF
 NLPMDSCVATKSLSPGH TLIPSSAVTPPESPQSDSLGSTYSINGLLGIAQPGSDKRKMDDSDQDSCRLSI
 DSQSSSSGPRKHLRTDAFSQHHLEPLECFERQHYPEAYASPSHTKGEQGLYPLPLLNSTLDDGKATLTP
 SNTPLGRNLSHTQYTPVADPHSPFAIKQETPEVSSSSSTPSSLSSSAFLDLQQVGSVPPFNAFPHAAS
 VYGQFTGQALLSGREMGPTLPGYPPHIP TSGQGSYASSA IAGMVAGSEYSGNAYGHTPYSSYSEAWRFP
 NSLLSSPYYYSSTRSPAPPTTATAFDHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6153_h06.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_003466

ORF Size: 1350 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_003466.4](#)

RefSeq Size: 4065 bp

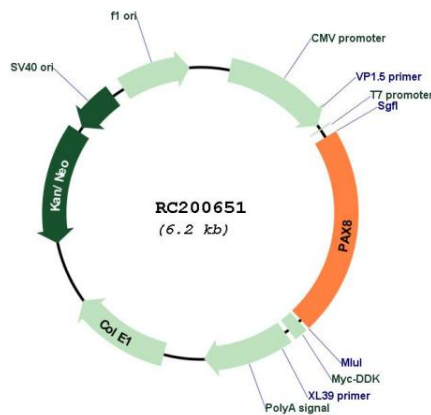
RefSeq ORF: 1353 bp

Locus ID: 7849

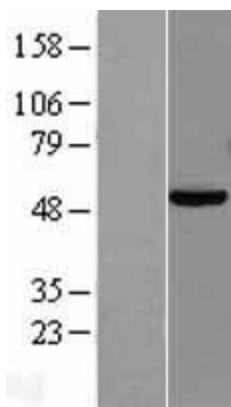
UniProt ID: [Q06710](#)

Cytogenetics:	2q14.1
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Pathways in cancer, Thyroid cancer
MW:	48.2 kDa
Gene Summary:	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]

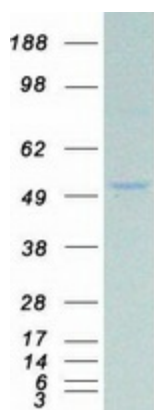
Product images:



Circular map for RC200651



Western blot validation of overexpression lysate (Cat# [LY401173]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200651 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PAX8 protein (Cat# [TP300651]). The protein was produced from HEK293T cells transfected with PAX8 cDNA clone (Cat# RC200651) using MegaTran 2.0 (Cat# [TT210002]).