

## Product datasheet for RC224471

### SOX21 (NM\_007084) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: SOX21 (NM\_007084) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: SOX21  
 Synonyms: SOX25  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC224471 representing NM\_007084  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGTCCAAGCCGGTGGACCACGTCAAGCGGCCCATGAACGCCTTCATGGTGTGGTCGCGGGCTCAGCGGC  
 GCAAGATGGCCCAGGAGAACCCCAAGATGCACAACCTCGGAGATCAGCAAGCGCTTGGGCGCCGAGTGAA  
 ACTGCTCACAGAGTCGGAGAAGCGGCCGTTTCATCGACGAGGCCAAGCGTCTACCGCCATGCACATGAAG  
 GAGACCCCGACTACAAGTACCGGCCGCGGCCAAGCCCAAGACGCTGCTCAAGAAGGACAAGTTCGCCT  
 TCCCGGTGCCCTACGGCCTGGGCGGCGTGGCGGACGCCGAGCACCTGCGCTCAAGGCGGCGCCGGGCT  
 GCACGCGGGGGCGGGCGCGGCCTGGTGCCTGAGTCGCTCGCCAATCCCGAGAAGGCGGCGCCGCGCC  
 GCCGCCGCTGCCGCCGACGCGTCTTCTCCCGCAGTCGGCCGCTGCCGCCGCCGCTGCCGCCGCCGCCG  
 CCGCCGCGGGCAGCCCTACTCGCTGCTCGACCTGGGCTCCAAAATGGCAGAGATCTCGTCGTCCTCGTC  
 CGGCCTCCCGTACGCGTCGTCGCTGGGCTACCCGACCGCGGGCGCGGGCGCCTTCCACGGCGCGGGCGG  
 GCGGCTGCAGCGGCGGCCGCCGCCGGGGGGCACACGCACTCGCACCCAGCCCGGGCAACCCGGGCT  
 ACATGATCCCGTGCAACTGCAGCGCGTGGCCAGCCCCGGGCTGCAGCCGCCGCTCGCCTACATCCTGCT  
 GCCGGCATGGCAAGCCCCAGCTGGACCCCTACCCCGCGGCCACGCTGCCCGCCTA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC224471 representing NM\_007084  
 Red=Cloning site Green=Tags(s)

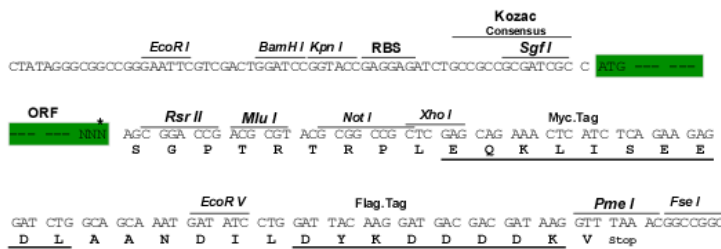
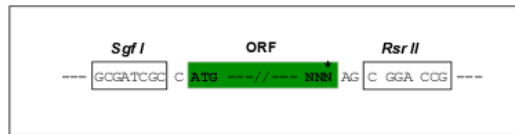
MSKPVDPVHKRPMNAFMVWSRAQRKMAQENPKMHNSEISKRLGAEWKLLTESEKRPFIDEAKRLRAMHMK  
 EHPDYKYRPRRKPKTLLKKDKFAFPVPYGLGGVADAHPALKAGAGLHAGAGGGLVPESLLANPEKAAAA  
 AAAAAARVFFPQSAAAAAAAAAAAGSPYSLLDLGSMAEISSSSGLPYASSLGYPTAGAGAFHGAAA  
 AAAAAAAGGHTSHSPGNGPYMPCNSAWPSPGLQPPLAYILLPGMGKPLDYPYAAAAAAL

SGPTRRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_007084

**ORF Size:** 828 bp

**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 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\\_007084.4](#)

**RefSeq Size:** 2537 bp

**RefSeq ORF:** 831 bp

**Locus ID:** 11166

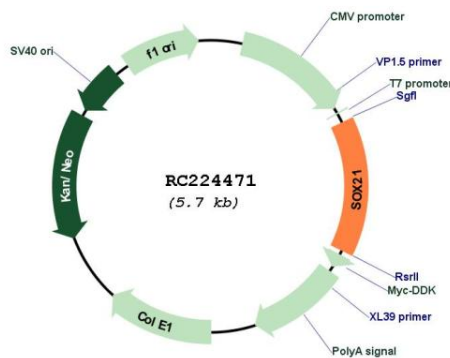
**UniProt ID:** [Q9Y651](#)

**Cytogenetics:** 13q32.1

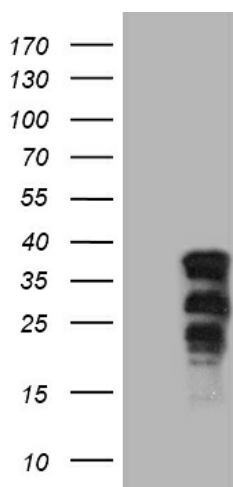
**MW:** 28.4 kDa

**Gene Summary:** SRY-related HMG-box (SOX) genes encode a family of DNA-binding proteins containing a 79-amino acid HMG (high mobility group) domain that shares at least 50% sequence identity with the DNA-binding HMG box of the SRY protein (MIM 480000). SOX proteins are divided into 6 subgroups based on sequence similarity within and outside of the HMG domain. For additional background information on SOX genes, see SOX1 (MIM 602148).[supplied by OMIM, Apr 2004]

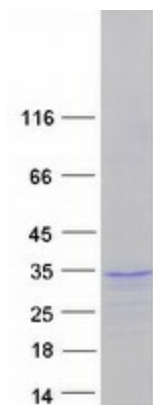
**Product images:**



Circular map for RC224471



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SOX21 (Cat# RC224471, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SOX21 (Cat# [TA807817])(1:2000).



Coomassie blue staining of purified SOX21 protein (Cat# [TP324471]). The protein was produced from HEK293T cells transfected with SOX21 cDNA clone (Cat# RC224471) using MegaTran 2.0 (Cat# [TT210002]).