

Product datasheet for **RC205121**

SOX8 (NM_014587) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	SOX8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205121 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGACATGAGCGAGGCCCGCTCCAGCCGCCCTGCAGCCCGTCCGGCACCGCCAGCTCCATGTGCG
ACGTGGAGGACTCGGACTCGGACGCGCCCGTCTCCGCGCGCTCCGAGGGCTGGGCCGCGGGGGT
CGCGGTGGGGGGCGCCGGGGGACCCGGCGGAGGCGGGACGAGCGCTTCCGGCCTGCATCCGCGAC
GCCGTGTCGAGGTGCTCAAGGGCTACGACTGGAGTCTGGTGCCCATGCCGTGCGCGGGCGGGCGCG
GCGCGCTCAAAGCAAGCCGCATGTGAAGCGGCCCATGAACGCATTTCATGGTGTGGCGCAGGCGGCGCG
CCGCAAGCTGGCCGACCACTACCCGCACCTGCACAACGCCGAGCTCAGCAAGACGCTGGGCAAGCTGTGG
CGCTTGCTGAGCGAGAGCGAGAAGCGGCCCTTCGTGGAGGAGGAGAGCGCCTTCGCGTGCAGCACAAGA
AGGACCACCCGACTACAAGTACCAGCCACGGCGCAGGAAGAGCGCCAAAGCCGGCCACAGCGACTCCGA
CTCGGGCGCGGAGCTGGGACCCACCTGGCGGCGGTGCCGTGTACAAGGCTGAAGCAGGGCTTGAGAT
GGGCACCACCATGGCGACCACAGGGCAGACCCACGGGCGGCCACCCCGCCACACCCCAAGACGG
AGCTGCAGCAGGCGGGCGCCAAGCCGAGCTGAAGCTGGAGGGACGCGGCGGTGGACAGCGGGCGCCA
GAACATCGACTTCAGCAACGTGGACATCTCGGAGCTCAGCAGCGAGGTTCATGGGCACCATGGACGCTTC
GACGTCCACGAGTTCGACCACTACCTGCCCTGGGCGGCCCGCCACCCGAGCCGGCCAGGCTACG
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GCCCACCGAGACGGGTCCCCACGGCGCACATCAAGACGGAGCAGCCGAGCCCGGCCACTACGCGAC
CAGCCCCGAGGCTCGCCGACTACGTTCTGCAGCGGCCAGTCCAGCGCCACCCCGGCCCGCCCGCG
GCCCCCTTCGCGGCTCACAGGGCGACTATGGCGACCTGCAGGCCTCCAGTACTATGGTGCTACCTGG
CTACGACCCGGCTCTACCACTACCCCTGCTTCCACTCGCGCGCGGCCCTACGCTACCCCTGCTC
AACGGCTGGCCCTGCCGCCGCCACAGCCCCACCACTACTGGGACCAGCCGGTGTACACCACCTGA
CCAGGCC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205121 protein sequence
 Red=Cloning site Green=Tags(s)

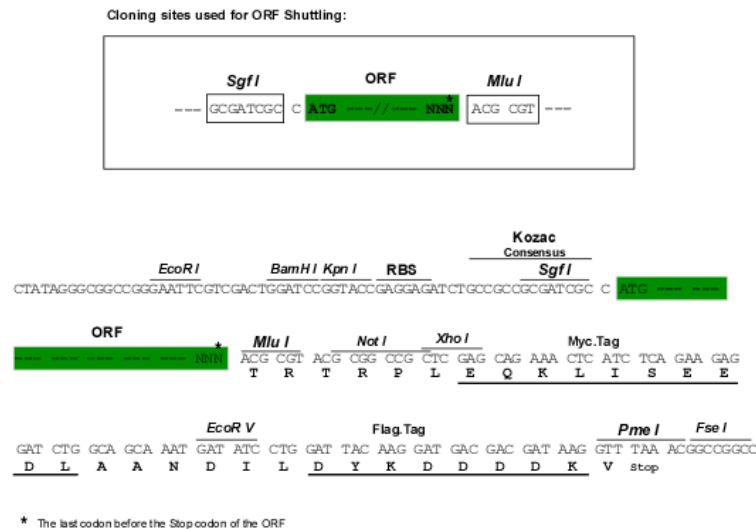
MLDMSEARSQPPCSPSGTASSMSHVEDSDSDAPPSPAGSEGLGRAGVAVGGARGDPAAEADERFPACIRD
 AVSQVLKGYDWSLVPMMPVRGGGGALKAKPHVKRPMNAFMVWAQAARRKLADQYPHLHNAELSKTLGKLW
 RLLSESEKRPFVEEAERLRVQHKKDHPDYKYQPRRRKSAKAGHSDSDSGAELGPHPGGGAVYKAEAGLGD
 GHHHGDHTGQTHGPPTPTTPKTELQQAGAKPELKLEGRRPVDSGRQNIIDFSNVDISELSSEVMGTMDAF
 DVHEFDQYLPGLGPAPPEPGQAYGGAYFHAGASPVWAHKSAPSASASPTETGPPRPHIKTEQPSPGHYGD
 QPRGSPDYGSCSQSSATPAAPAGPFAQSQGDYDGLQASSYYGAYPGYAPGLYQYPCFHSPPRPYASPLL
 NGLALPPAHSPTSHWDQPVYTTLTRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6832_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014587

ORF Size: 1338 bp

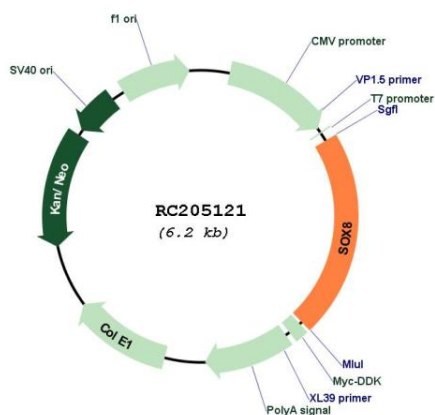
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

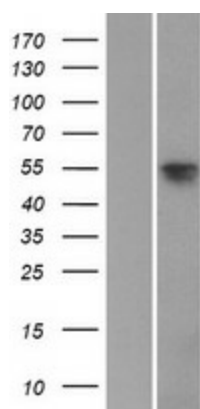
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_014587.5</u>
RefSeq Size:	3049 bp
RefSeq ORF:	1341 bp
Locus ID:	30812
UniProt ID:	<u>P57073</u>
Cytogenetics:	16p13.3
Protein Families:	Transcription Factors
MW:	47.3 kDa
Gene Summary:	This gene encodes a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of the cell fate. The encoded protein may act as a transcriptional activator after forming a protein complex with other proteins. This protein may be involved in brain development and function. Haploinsufficiency for this protein may contribute to the cognitive disability found in an alpha-thalassemia-related syndrome (ART-16). This protein is also highly expressed in the majority of human hepatocellular carcinomas and promotes cellular proliferation and enhanced tumor growth. [provided by RefSeq, Jul 2017]

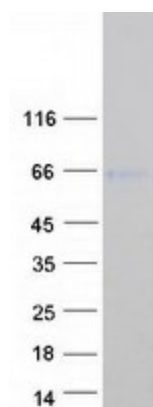
Product images:



Circular map for RC205121



Western blot validation of overexpression lysate (Cat# [LY415186]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205121 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SOX8 protein (Cat# [TP305121]). The protein was produced from HEK293T cells transfected with SOX8 cDNA clone (Cat# RC205121) using MegaTran 2.0 (Cat# [TT210002]).