

# **Product datasheet for RC209139**

## SOX4 (NM\_003107) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** SOX4 (NM\_003107) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: SOX4

Synonyms: CSS10; EVI16

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

#### OriGene Technologies, Inc.

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ORF Nucleotide Sequence:

>RC209139 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGCAGCAAACCAACAATGCCGAGAACACGGAAGCGCTGCTGGCCGGCGAGAGCTCGGACTCGGGCG CCGGCCTCGAGCTGGGAATCGCCTCCTCCCCCACGCCCGGCTCCACCGCCTCCACGGGCGGCAAGGCCGA CGACCCGAGCTGGTGCAAGACCCCGAGTGGGCACATCAAGCGACCCATGAACGCCTTCATGGTGTGGTCG CAGATCGAGCGGCGCAAGATCATGGAGCAGTCGCCCGACATGCACAACGCCGAGATCTCCAAGCGGCTGG GCAAACGCTGGAAGCTGCTCAAAGACAGCGACAAGATCCCTTTCATTCGAGAGGCGGAGCGGCTGCGCCT CAAGCACATGGCTGACTACCCCGACTACAAGTACCGGCCCAGGAAGAAGGTGAAGTCCGGCAACGCCAAC TCCAGCTCCTCGGCCGCCTCCTCCAAGCCGGGGAGAAGGGAGACAAGGTCGGTGGCAGTGGCGGGG GTTAGCAAACCGCACGCCAAGCTCATCCTGGCAGGCGGCGGCGGCGGCGGAAAGCAGCGGCTGCCGCCG CTCGCTGTACAAGGCGCGGACTCCCAGCGCCTCGGCCTCCTCGGCAGCCTCGGCCTCCGCAGCG CTCGCGGCCCCGGGCAAGCACCTGGCGGAGAAGAAGGTGAAGCGCGTCTACCTGTTCGGCGGCCTGGGCA CGTCGTCGTCGCCCGTGGGCGGCGTGGGCGCGGGACCCCAGCGACCCCCTGGGCCTGTACGAGGA GGAGGGCGCGGGCTGCTCGCCCGACGCCCCAGCCTGAGCGGCCGCAGCAGCAGCGCCGCCTCGTCCCCCGCC CGCCCTCGCACGCGTCCTCCTCGGCCTCGTCCCACTCCTCCTCCTCCTCCTCGGGCTCCTCGTCCTC CGACGACGAGTTCGAAGACGACCTGCTCGACCTGAACCCCAGCTCAAACTTTGAGAGCATGTCCCTGGGC AGCTTCAGTTCGTCGGCGCTCGACCGGGACCTGGATTTTAACTTCGAGCCCGGCTCCGGCTCCGCACT TCGAGTTCCCGGACTACTGCACGCCCGAGGTGAGCGAGATGATCTCGGGAGACTGGCTCGAGTCCAGCAT CTCCAACCTGGTTTTCACCTAC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTCGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** 

>RC209139 protein sequence Red=Cloning site Green=Tags(s)

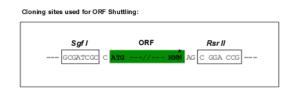
MVQQTNNAENTEALLAGESSDSGAGLELGIASSPTPGSTASTGGKADDPSWCKTPSGHIKRPMNAFMVWS QIERRKIMEQSPDMHNAEISKRLGKRWKLLKDSDKIPFIREAERLRLKHMADYPDYKYRPRKKVKSGNAN SSSSAAASSKPGEKGDKVGGSGGGGHGGGGGGGSSNAGGGGGGASGGGANSKPAQKKSCGSKVAGGAGGG VSKPHAKLILAGGGGGGKAAAAAAASFAAEQAGAAALLPLGAAADHHSLYKARTPSASASASSAASASAA LAAPGKHLAEKKVKRVYLFGGLGTSSSPVGGVGAGADPSDPLGLYEEEGAGCSPDAPSLSGRSSAASSPA AGRSPADHRGYASLRAASPAPSSAPSHASSSASSHSSSSSSSSSDDEFEDDLLDLNPSSNFESMSLG SFSSSSALDRDLDFNFEPGSGSHFEFPDYCTPEVSEMISGDWLESSISNLVFTY

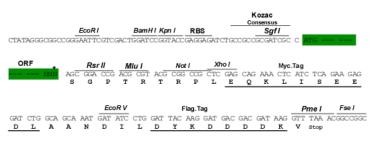
**SGPTRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Restriction Sites:** Sgfl-Rsrll



#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_003107

ORF Size: 1422 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <u>More info</u>

**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:** <u>NM 003107.3</u>

 RefSeq Size:
 4912 bp

 RefSeq ORF:
 1425 bp

 Locus ID:
 6659

 UniProt ID:
 Q06945

 Cytogenetics:
 6p22.3

 Domains:
 HMG

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Stem cell

relevant signaling - TGFb/BMP signaling pathway, Transcription Factors

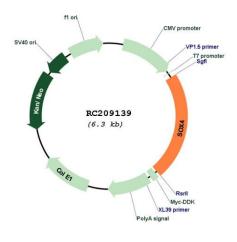
**MW:** 47.3 kDa

**Gene Summary:** This intronless 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 regulator after forming a protein complex with other proteins, such as syndecan binding protein (syntenin). The protein may function in the apoptosis pathway leading to cell death as well as to tumorigenesis and may mediate downstream effects of parathyroid hormone (PTH) and PTH-related protein (PTHrP) in bone development. The solution structure has been resolved

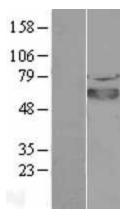
for the HMG-box of a similar mouse protein. [provided by RefSeq, Jul 2008]

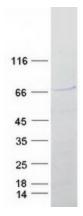
### **Product images:**



Circular map for RC209139







Western blot validation of overexpression lysate (Cat# [LY418894]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209139 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified SOX4 protein (Cat# [TP309139]). The protein was produced from HEK293T cells transfected with SOX4 cDNA clone (Cat# RC209139) using MegaTran 2.0 (Cat# [TT210002]).