

## Product datasheet for SC303264

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## SHOX2 (NM\_003030) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** SHOX2 (NM\_003030) Human Untagged Clone

Tag: Tag Free Symbol: SHOX2

Synonyms: OG12; OG12X; SHOT

**Vector:** pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM\_003030, the custom clone sequence may differ by one or more

nucleotides

ATGGAAGAACTTACGGCGTTCGTCTCCAAGTCTTTTGACCAGAAAGTGAAGGAGAAGAAG GAGGCGATCACGTACCGGGAGGTGCTGGAGAGCGGGCCGCTGCGGGGGCCAAGGAGCCG GGAGGAGCAGGCGGAGGAGCTGGAGGAGGGCGCTCTCCCGTCCGGGAGCTGGACATGGGC ACGAAAGCTGAGGTCCAGGCTACGCTGCTTCTCCCGGGCGAGGCGTTTCGGTTTCTTGTG TCCCCGGAGCTGAAAGATCGCAAAGAGGATGCGAAAGGGATGGAGGACGAAGGCCAGACC AAAATCAAGCAGAGGCGAAGTCGGACCAATTTCACCCTGGAACAACTCAATGAGCTGGAG AGGCTTTTTGACGAGACCCACTATCCCGACGCCTTCATGCGAGAGGAACTGAGCCAGCGA CTGGGCCTGTCGGAGGCCCGAGTGCAGGTTTGGTTTCAAAATCGAAGAGCTAAATGTAGA TGTAGAGTCGCACCTTATGTCAACGTAGGTGCTTTAAGGATGCCATTTCAGCAGGATAGT CATTGCAACGTGACGCCCTTGTCCTTTCAGGTTCAGGCGCAGCTGCAGCTGGACAGCGCT GTGGCGCACGCGCACCACCTGCATCCGCACCTGGCCGCGCACGCGCCCTACATGATG TTCCCAGCACCGCCTTCGGACTGCCGCTCGCCACGCTGGCCGCGGATTCGGCTTCCGCC GCCTCGGTAGTGGCGGCCGCAGCAGCCGCCAAGACCACCAGCAAGAACTCCAGCATCGCC GATCTCAGACTGAAAGCCAAAAAGCACGCCGCAGCCCTGGGTCTGTGA

**Restriction Sites:** Please inquire

ACCN: NM 003030

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:** <u>NM 003030.2</u>, <u>NP 003021.1</u>

 RefSeq Size:
 1696 bp

 RefSeq ORF:
 573 bp

 Locus ID:
 6474

 UniProt ID:
 060902

 Cytogenetics:
 3q25.32

**Protein Families:** Transcription Factors

**Gene Summary:** This gene is a member of the homeobox family of genes that encode proteins containing a

60-amino acid residue motif that represents a DNA binding domain. Homeobox genes have been characterized extensively as transcriptional regulators involved in pattern formation in both invertebrate and vertebrate species. Several human genetic disorders are caused by aberrations in human homeobox genes. This locus represents a pseudoautosomal homeobox gene that is thought to be responsible for idiopathic short stature, and it is implicated in the short stature phenotype of Turner syndrome patients. This gene is considered to be a candidate gene for Cornelia de Lange syndrome. Alternative splicing

results in multiple transcript variants. [provided by RefSeq, Jul 2009]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (b). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.