

Product datasheet for **SC123774**

SOX10 (BC002824) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SOX10 (BC002824) Human Untagged Clone
Tag:	Tag Free
Symbol:	SOX10
Synonyms:	DOM; dominant megacolon, mouse, human homolog of; MGC15649; OTTHUMP00000028515; OTTHUMP00000195094; SRY (sex determining region Y)-box 10; SRY-related HMG-box gene 10; WS2E; WS4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for BC002824 edited
CCGAGGAGGTGGGCGTTGGACTCTTTGCGAGGACCCCGGCGGCTGGCCCGGGGGAGGCGG
CCGAGGCGGGCGGGCGGGCGGCCGGGGGCGACATGGCGGAGGAGCAGGACCTATCGGAGG
TGGAGCTGAGCCCCGTGGGCTCGGAGGAGCCCCGCTGCCTGTCCCGGGGAGCGGCCCT
CGTAGGGCCCGACGGCGGGCGGGCGGATCGGGCCTGCGAGCCAGCCCGGGGCCAGGCG
AGCTGGCAAGGTCAAGAAGGAGCAGCAGGACGGCGAGGGCGAGCATGACAAGTTCCCCG
TGTGCATCCGCGAGGCCGTCAGCCAGGTGCTCAGCGGCTACGACTGGACGCTGGTGCCCA
TGCCCGTGC GCGTCAACGGCGCCAGCAAAAGCAAGCCGACGTCAAGCGGCCATGAACG
CCTTCATGGTGTGGGCTCAGGCAGCGCGAGGAAGCTCGCGGACCACTACCCGCACCTGC
ACAACGCTGAGCTCAGCAAGACGCTGGGCAAGCTCTGGAGGCTGCTGAACGAAAGTGACA
AGCGCCCCCTTCATCGAGGAGGCTGAGCGGCTCCGTATGCAGCACAAAGAAAGACCACCCGG
ACTACAAGTACCAGCCCAGGCGGGCGGAAGAACGGGAAGGCCGCCAGGGCGAGGCGGAGT
GCCCGGTGGGGAGGCCGAGCAAGGTGGGACCGCCGCATCCAGGCCACTACAAGAGCG
CCCCTTGAGACCACCGGCACCCAGGAGAGGGCTCCCCATGTGAGATGGGAACCCCGAGC
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AGTCGGGCAAGGCAGACCCGAAGCGGGACGGGCGCTCCATGGGGGAGGGCGGGAAGCCTC
ACATCGACTTCGCAACGTGGACATTGGTGAGATCAGCCACGAGGTAATGTCCAACATGG
AGACCTTTGATGTGGCTGAGTTGGACAGTACCTGCCGCCAATGGGCACCCAGGCCATG
TGAGCAGCTACTCAGCAGCCGGCTATGGGCTGGGCAGTGCCCTGGCCGTGGCCAGTGGAC
ACTCCGCTGGATCTCCAAGCCACCAGGCGTGGCTCTGCCACGGTCTCACCACTGGTG
TGGATGCCAAAGCCCAGGTGAAGACAGAGACCGCGGGGCCCCAGGGGCCCCCACTACA
CCGACCAGCCATCCACCTCACAGATCGCTACACCTCCCTCAGCCTGCCCCACTATGGCT
CAGCCTTCCCTCCATCTCCCGCCCCAGTTTGACTACTCTGACCATCAGCCCTCAGGAC
CCTATTATGGCCACTCGGGCCAGGCCTCTGGCCTCTACTCGGCCTTCTCCTATATGGGGC
CCTCGCAGCGGCCCTCTACACGGCCATCTCTGACCCAGCCCTCAGGGCCCCAGTCCC
ACAGCCCCACACTGGGAGCAGCCAGTATATACGACTGTCCCGGCCCTAAAGGGGGC
CCTGTGCGCACCCACCCCGCCAGCCCTGCCCCAGCCTGTGTGCCCTGTTCTTGCC
CACCTCAGGCCTGGTGGTGGCAGTGGAGGAGGCTGAGGAGGCTGAAGAGGCTGACAGGTC
GGGGGGCTTTCTGTCTGGCTCACTGCCCTGATGACCCACCCGCCCATCCAGGCTCCAGC
AGCAAAGCCCCAGGAGAACAGGCTGGACAGAGGAGAAGGAGTTGACTGTTGCACCCACA
CTGAAAGATGAGGGGCTGCACCTTCCCCAGGAATGACCTCTATCCCAGGACCTGAGAA
GGGCTGCTCACCTCCTCGGGGAGGGGAAGCACCAGGGTTGGTGGCATCGGAGGCCTTA
CCTCCTATGACTCCTGTTTTCTCTCTCACAGATAGTGAGGGTCTGACATGCCATGCC
ACCTATGCCACAGTGCCTAAGGGCTAGGCCACCCAGAGACTGTGCCCGGAGCTGGCCGTG
TCTCCACTCAGGGGCTGAGAGTAGCTTTGAGGAGCCTCATTGGGGAGTGGGGGTTTCA
GGGACTTAGTGGAGTTCTCATCCCTTAATGCCCCCTCCCTTTCTGAAGGCAGGAAGGAG
TTGGCACAGAGGCCCCCTGAAAAAAAAAAAAAAAAAAAA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for BC002824 unedited AAAACAGTTTCAGGATTTGTATACGACTTATATAGGCGGCACGCGAATTCGCACGAGGCCG AGGAGGTGGGCGTTGGACTCTTTGCGAGGACCCCGCGGCTGGCCCGGGGAGGCGGCCG AGGCGGCGGGCGGGCGGGCCGGGGGCGACATGGCGGAGGAGCAGGACCTATCGGAGGTGG AGCTGAGCCCCGTGGGCTCGGAGGAGCCCCGCTGCCTGTCCCGGGGAGCGCCCTCGC TAGGGCCCAGCGCGGGCGGGCGGATCGGGCTGCGAGCCAGCCCGGGGCCAGGCGAGC TGGGCAAGGTCAAGAAGGAGCAGCAGGACGGCGAGGCGGACGATGACAAGTTCCCGTGT GCATCCGCGAGGCGTACGCCAGGTGCTCAGCGGCTACGACTGGACGCTGGTGCCCATGC CCGTGCGCGTCAACGGCGCCAGCAAAAAGCAAGCCGACGTCGCAAGCGGCCATGAACGCT TCATGGTGTGGGCTCAGGCAGCGCATGAAGCTCGCGGACCAGTACCCGCACCTGCACA ACGCTGAGCTCAGCAAGACGCTGGGCAAGCTCTGGAGGCTGCTGAACGAAAGTGACAAGC GCCCTTCATCGAGGAGGCTGAGCGGCTCCGTATGCAGCACAAGAAAGACCACCCGGACT ACAAGTACCAGCCAGGCGGCGGAAGAACGGGAAGGCCGCCATGGCGAGGCGGAGTGCC CCGGTGGGAGGCGGAGCAAGGTGGGACCGCCGCATCCAGGCCACTACAAGAGCGCCC ACTTGGACCACCGCACCCAGGAGAGGGCTCCCCATGTCAGATGGGAACCCCGAGCACC CCTCATGCCAGAGTCATGCCNATCCACCCTGCAACCACCC
Restriction Sites:	Please inquire
ACCN:	BC002824
Insert Size:	2146 bp
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).
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:	<ol style="list-style-type: none"> 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:	BC002824.2 , AAH02824.1
RefSeq Size:	2137 bp
Locus ID:	6663
Cytogenetics:	22q13.1
Protein Families:	Adult stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

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 acts as a nucleocytoplasmic shuttle protein and is important for neural crest and peripheral nervous system development. Mutations in this gene are associated with Waardenburg-Shah and Waardenburg-Hirschsprung disease. [provided by RefSeq, Jul 2008]