

Product datasheet for **SC122252**

Oct4 (POU5F1) (BC020712) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Oct4 (POU5F1) (BC020712) Human Untagged Clone
Tag: Tag Free
Symbol: Oct4
Synonyms: Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for BC020712 edited
 CATGAGTCAGTGAACAGGGAATGGGTGAATGACATTTGTGGGTAGGTTATTTCTAGAAGT
 TAGGTGGGCAGCTTGGAAAGGCAGAGGCACTTCTACAGACTATTCCTTGGGGCCACACGTA
 GGTTCTTGAATCCCGAATGGAAAAGGGGAGATTGATAATTGGTGTGTTTATGTTCTTACAA
 GTCTTCTGCCTTTTAAAAATCCAGTCCCAGGACATCAAAGCTCTGCAGAAAAGAACTCGAGC
 AATTTGCCAAGCTCCTGAAGCAGAAGAGGATCACCTGGGATATACACAGGCCGATGTGG
 GGCTCACCTGGGGTTCTATTTGGGAAGGTATTCAGCCAAACGACCATCTGCCGCTTTG
 AGGCTCTGCAGCTTAGCTTCAAGAACATGTGTAAGCTGCGGCCCTTGCTGCAGAAGTGGG
 TGGAGGAAGCTGACAACAATGAAAATCTTCAGGAGATATGCAAAGCAGAAACCCTCGTGC
 AGGCCCGAAAAGAAAAGCGAACCAGTATCGAGAACCGAGTGAGAGGCAACCTGGAGAATT
 TGTTCTGCAGTGCCCGAAAACCGACACTGCAGCAGATCAGCCACATCGCCAGCAGCTTG
 GGCTCGAGAAGGATGTGGTCCGAGTGTGGTTCTGTAACCGGCCAGAGAAGGGCAAGCGAT
 CAAGCAGCGACTATGCACAACGAGAGGATTTTGAGGCTGCTGGGTCTCCTTTCTCAGGGG
 GACCAGTGCCTTTCTCTGGCCCCAGGGCCCCATTTTGGTACCCAGGCTATGGGAGCC
 CTCACCTCACTGCACTGTACTCCTCGGTCCCTTTCCCTGAGGGGGAAGCCTTTCCCCCTG
 TCTCCGTCACTCTGGGCTCTCCATGCATTCAAACAGAGGTGCCTGCCCTTCTAGGA
 ATGGGGACAGGGGGAGGGGAGGAGCTAGGAAAGAAAACCTGGAGTTTGTGCCAGGGTT
 TTTGGGATTAAGTTCTTCATTCACTAAGGAAGGAATTGGGAACACAAAGGTGGGGCAG
 GGGAGTTTGGGGCAACTGGTTGGAGGGAAGGTGAAGTTCAATGATGCTCTTGATTTTAAT
 CCCACATCATGTATCACTTTTTTTCTTAAATAAAGAAGCCTGGGACACAGTAGATAGGCAA
 AAAAAAAAAAAAAAAAAAAAAAAAAA



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for BC020712 unedited TTCGGATTTGTATACGACNACTATAGGGCGGCCGCAATTCGCCATTACGGCCGGGGCAT GAGTCAGTGAACAGGGAATGGGTGAATGACATTTGTGGGTAGGTTATTTCTAGAAGTTAG GTGGGCAGCTTGAAGGCAGAGGCACCTTCTACAGACTATTCCTTGGGGCCACACGTAGGT TCTTGAATCCCGAATGAAAGGGGAGATTGATAATTGGTGTGTTTATGTTCTTACAAGTC TTCTGCCTTTTAAAATCCAGTCCCAGGACATCAAAGCTCTGCAGAAAGAACTCGAGCAAT TTGCCAAGCTCCTGAAGCAGAAGAGGATCACCCCTGGGATATACACAGGCCGATGTGGGGC TCACCCTGGGGTCTATTTGGGAAGGTATTCAGCCAAACGACCATCTGCCGCTTTGAGG CTCTGCAGCTTAACTTCAAGAACATGTGTAAGCTGCGGCCCTTGCTGCAGAAGTGGGTGG AGGAAGCTGACAACAATGAAAATCTTCAGGAGATATGCAAAGCAGATACCCTCGTGCANG CCCGAAAGAGAAAGCGAACCAAGTATCGAGAACCGAGTGAGAGGCAACCTGGAGAATTTGT TCCTGCAGTGCCCGANACCGACTGCAGCAGATCAGCCACATCGCCAGCAGCTTGGGC TCGAGAAGGATGTGGTCCGAGTGTGTTCTGTAACCGGCCGAGAAAGGCAAGCGATCAA GCAGCGACTATGCACAACGAGAGGATTTTGAGGCTGCTGGGTCTCCTTTCTCAGGGGGAC AGTGTTCCTTCTCTGGCCAGGGCCCCATTTTGTACCCAGCTAGGGAAGCCTCACTGA CTGCACTGACTCCTTGGTCCCTTCCCTGAGGGGAAACCTTTCCCCTGTGTCGGGACC AATCTGGGTTCTCCTGCATCAAACCTGAGGGCCG
Restriction Sites:	Please inquire
ACCN:	BC020712
Insert Size:	1167 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:	BC020712.1
RefSeq Size:	1167 bp
Locus ID:	5460
Cytogenetics:	6p21.33
Protein Families:	Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors

Gene Summary:

This gene encodes a transcription factor containing a POU homeodomain that plays a key role in embryonic development and stem cell pluripotency. Aberrant expression of this gene in adult tissues is associated with tumorigenesis. This gene can participate in a translocation with the Ewing's sarcoma gene on chromosome 21, which also leads to tumor formation. Alternative splicing, as well as usage of alternative AUG and non-AUG translation initiation codons, results in multiple isoforms. One of the AUG start codons is polymorphic in human populations. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12. [provided by RefSeq, Oct 2013]