

Product datasheet for **SC316000**

RBFOX2 (NM_001082578) Human Untagged Clone

Product data:

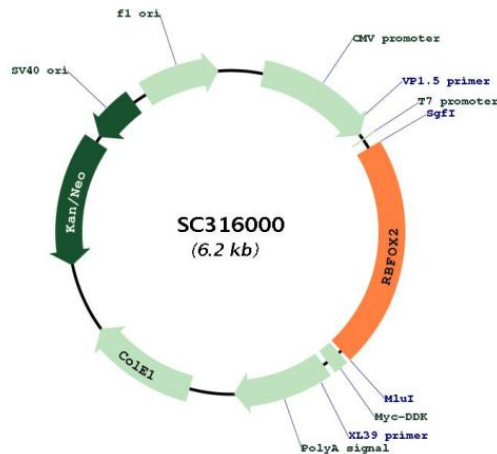
Product Type:	Expression Plasmids
Product Name:	RBFOX2 (NM_001082578) Human Untagged Clone
Tag:	Tag Free
Symbol:	RBFOX2
Synonyms:	dj106l20.3; Fox-2; FOX2; fxb; HNRBP2; HRNBP2; RBM9; RTA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC316000 representing NM_001082578. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_001082578

Insert Size: 1356 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).

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: [NM_001082578.1](#)

RefSeq Size: 6957 bp

RefSeq ORF: 1356 bp

Locus ID: 23543

UniProt ID: [O43251](#)

Cytogenetics: 22q12.3

Protein Families: Druggable Genome, Transcription Factors

MW: 47.3 kDa

Gene Summary: This gene is one of several human genes similar to the *C. elegans* gene Fox-1. This gene encodes an RNA binding protein that is thought to be a key regulator of alternative exon splicing in the nervous system and other cell types. The protein binds to a conserved UGCAUG element found downstream of many alternatively spliced exons and promotes inclusion of the alternative exon in mature transcripts. The protein also interacts with the estrogen receptor 1 transcription factor and regulates estrogen receptor 1 transcriptional activity. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (5) contains a distinct 5' UTR, 5' CDS, and uses an alternate in-frame splice site in the coding region, compared to variant 1. The resulting protein (isoform 5) is longer and has a distinct N-terminus compared to isoform 1. **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments. **CCDS Note:** This CCDS representation is supported by accession DQ778625.1. It includes an alternative splice acceptor for exon 10 compared to the variants represented by NM_014309.2 (CCDS13921.1) and NM_001082576.1 (CCDS46701.1). This is a non-canonical 'GG' splice acceptor site as compared to the 'AG' acceptor found in NM_014309.2 and NM_001082576.1, but the 'GG' splice acceptor is supported by 30 human transcripts and by transcripts in other species, including mouse (e.g., AK139555.1, AK077594.1, AK055213.1, AY659953.1, DQ017388.1 and several ESTs), rat (BC128766.1, BM388666.1), cow (BT026301.1 and several ESTs), pig (AK236515.1 and a few ESTs), sheep (EE755507.1, EE862219.1) and dog (CO666028.1, CO586266.1).