

## Product datasheet for **MR207447**

### Sox10 (BC018551) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sox10 (BC018551) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sox10
Synonyms:	Dom; gt; Sox21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR207447 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGAGGAACAAGACCTATCAGAGGTGGAGCTGAGCCCTGTGGGCTCGGAGGAACCCCGCTGCCTGT  
 CCCAGGCAGCGCGCCGTCGCTGGGACCCGACGCGCGCGGGTGGCTCGGGCTTGCAGCCAGCCCGGG  
 GCCCGGTGAAGTGGCAAGGTCAAGAAGGAACAGCAGGACGCGGAGGCGGACGATGACAAGTTCGCCGTG  
 TGCATCCGCGAGGCGGTGAGCCAGGTGCTCAGCGGCTACGACTGGACGCTGGTGGCCATGCCCGTGC  
 TCAACGGTGCCAGCAAGAGCAAGCCGACGTCAAGAGGCCATGAACGCCTTCATGGTGTGGGCACAGGC  
 GGCACGCAGAAAGCTAGCCGACCACTACCTCACCAATGCTGAGCTCAGCAAGACACTAGGCAAG  
 CTCTGGAGTTGCTGAACGAAAGTGACAAGCGCCCTTCATTGAGGAGGCTGAGCGGCTCCGGATGCAGC  
 AAAAAAGGACCATCCGACTACAAGTACAACCTCGGCGCGGAAGAACGGGAAGGCAGCCAGGGGGA  
 GGCAGAATGCCAGGCGGGAAGCCGAGCAAGGAGGGGCTGCTGCTATTAGGCTCACTACAAGAGTGCC  
 CACTGGACCACCGGCACCCAGAAGAAGGCTCCCCATGTCAGATGGGAACCCAGAGCACCCCTCAGGCC  
 AGAGCCATGGCCCCCAACCCCTCCAACACCCCAAGACAGAGCTGCAGTCCGGCAAGGAGACCCCAA  
 AAGGGATGGGCGCTCCTTGGGGGAGGGCGGAAGCCACATCGACTTCGGCAACGTGGACATCGGGGAG  
 ATCAGCCACGAGGTAATGTCCAACATGGAACCTTTGATGTGACTGAGCTGGACCAATACCTGCCACCCA  
 ACGGGCACCCAGGCCATGTGGGTAGCTACTCGGCAGCTGGCTATGGGCTGGGAGTGCCTGGCTGTGGC  
 CAGTGGACACTCTGCCTGGATCTCCAAGCCACAGGTGTGGCTCTGCCACGGTCTCGCCCCCTGGTGTG  
 GATGCCAAAGCCAGGTGAAGACAGAGACCACAGGCCCCAGGGACCCCACTACACCCAGCAGCCGT  
 CCATTCACAGATCGCCTACACCTCCCTCAGTCTGCCCCACTACGGCTCCGCCTTCCCCTCCATCTCAG  
 ACCCCAGTTTGACTATTCTGACCATCAGCCCTCAGGACCTATTATGGCCATGCAGGCCAGGCCTCTGGC  
 CTCTATTAGCCTTTTCTTACATGGGGCCCTCCAGCGGCCCTCTACACTGCCATCTCTGACCCAGCC  
 CCTCGGGGCCCAATCCACAGTCCACACACTGGGAGCAGCCAGTATATACGACTCTATCCCGACCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR207447 protein sequence  
 Red=Cloning site Green=Tags(s)

MAEEQDLSEVELSPVGSEEPRLSPGSAPSLGPDGGGGGSLRASPGGELGKVKKEQQDGEADDDKFPV  
 CIREAVSQVLSGYDWTLVPMPVRVNGASKSKPHVKRPMNAFMVWAQAARRKLADQYPHLHNAELSKTLGK  
 LWRLLNESDKRPFIEEAERLRMQHKKDHPDYKYQPRRRKNGKAAQGEAECPGGEAEQGAAAIQAHYKSA  
 HLDHRHPEEGSPMSDGNPEHPSGQSHGPPTPPTTPKTELQSGKADPKRDGRSLGEGGKPHIDFGNVDIGE  
 ISHEVMSNMETFVTELDQYLPNGHPGHVGSYSAAGYGLGSALAVASGHSAWISKPPGVALPTVSPPGV  
 DAKAQVKTETTGPQPPHYTDQPSTSQIAYTSLSLPHYGSAFPISRPQFDYSDHQPSGPYYGHAGQASG  
 LYSAFSYMGPSQRPLYTAISDPSPSGPQSHSPTHWEQPVYTTLSRP

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** BC018551

**ORF Size:** 1398 bp

**OTI Disclaimer:** 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. [More info](#)

**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:** [BC018551](#), [AAH18551](#)
**RefSeq Size:** 2554 bp

**RefSeq ORF:** 1400 bp

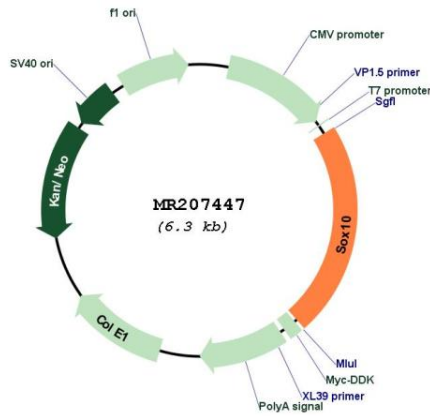
**Locus ID:** 20665

**Cytogenetics:** 15 37.7 cM

**MW:** 49.9 kDa

**Gene Summary:** Transcription factor that plays a central role in developing and mature glia (PubMed:24204311, PubMed:27532821). Specifically activates expression of myelin genes, during oligodendrocyte (OL) maturation, such as DUSP15 and MYRF, thereby playing a central role in oligodendrocyte maturation and CNS myelination (PubMed:24204311, PubMed:27532821). Once induced, MYRF cooperates with SOX10 to implement the myelination program (PubMed:24204311). Transcriptional activator of MITF, acting synergistically with PAX3 (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR207447