

Product datasheet for **MG207458**

Sox10 (BC025171) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sox10 (BC025171) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sox10
Synonyms:	Dom; gt; Sox21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207458 representing BC025171
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCCGAGGAACAAGACCTATCAGAGGTGGAGCTGAGCCCTGTGGGCTCGGAGGAACCCCGCTGCCTGT
 CCCAGGCAGCGCGCCGTCGCTGGGACCCGACGCGCGCGGGTGGCTCGGGCTTGCAGCCAGCCCGGG
 GCCCGGTGAAGTGGCAAGGTCAAGAAGGAACAGCAGGACGCGGAGGCGGACGATGACAAGTTCCTCGTG
 TGCATCCGCGAGGCGGTGAGCCAGGTGCTCAGCGGCTACGACTGGACGCTGGTGGCCATGCCCGTGCAGC
 TCAACGGTGCCAGCAAGAGCAAGCCGACGTCAAGAGGCCATGAACGCCTTCATGGTGTGGGCACAGGC
 GGCACGCAGAAAGCTAGCCGACCACTACCTCACCAATGCTGAGCTCAGCAAGACACTAGGCAAG
 CTCTGGAGGTTGCTGAACGAAAGTGACAAGCGCCCTTCATTGAGGAGGCTGAGCGGCTCCGGATGCAGC
 AAAAAAGGACCATCCGACTACAAGTACAACCTCGGCGCGGAAGAACGGGAAGGCAGCCAGGGGGG
 GGCAGAAATGCCAGGCGGGAAGCCGAGCAAGGAGGGGCTGCTGCTATTAGGCTCACTACAAGAGTGCC
 CACTGGACCACCGGCACCCAGAAGAAGGCTCCCCATGTCAGATGGGAACCCAGAGCACCCCTCAGGCC
 AGAGCCATGGCCCCCAACCCCTCAACACCCCAAGACAGAGCTGCAGTCCGGCAAGGCAGACCCCAA
 AAGGGATGGGCGCTCCTTGGGGGAGGGCGGAAGCCACATCGACTTCGGCAACGTGGACATCGGGGAG
 ATCAGCCACGAGGTAATGTCCAACATGGAACCTTTGATGTGACTGAGCTGGACCAATACCTGCCACCCA
 ACGGGCACCCAGGCCATGTGGGTAGCTACTCGGCAGCTGGCTATGGGCTGGGAGTGCCTGGCTGTGGC
 CAGTGGACACTCTGCCTGGATCTCCAAGCCACAGGTGTGGCTCTGCCACGGTCTCGCCCCCTGGTGTG
 GATGCCAAAGCCAGGTGAAGACAGAGACCACAGGCCCCAGGGACCCCACTACACCCAGCAGCCGT
 CCACTCCAGATCGCCTACACCTCCCTCAGTCTGCCCCACTACGGCTCCGCCTTCCCTCCATCTCAGC
 ACCCCAGTTTGACTATTCTGACCATCAGCCCTCAGGACCTATTATGGCCATGCAGGCCAGGCCTCTGGC
 CTCTATTAGCCTTTTCTTACATGGGGCCCTCCAGCGGCCCTCTACACTGCCATCTCTGACCCAGCC
 CCTCGGGGCCCAATCCACAGTCCACACACTGGGAGCAGCCAGTATATACGACTCTATCCCGACCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG207458 representing BC025171
 Red=Cloning site Green=Tags(s)

MAEEQDLSEVELSPVGSEEPRLSPGSAPSLGPDGGGGGSLRASPGGELGKVKKEQQDGEADDDKFPV
 CIREAVSQVLSGYDWTLPMPVVRVNGASKSKPHVKRPMNAFMVWAQAARRKLADQYPHLHNAELSKTLGK
 LWRLLESKRPFIEEAERLRMQHKDHPDYKYQPRRRKNGKAAQGEAECPGGEAEQGGAAAIQAHYKSA
 HLDHRHPEEGSPMSDGNPEHPSGQSHGPPTPTTPKTELQSGKADPKRDGRSLGEGGKPHIDFGNVDIGE
 ISHEVMSNMETFVTELDQYLPNGHPGHVGSYSAAGYGLGSALAVASGHSAWISKPPGVALPTVSPPGV
 DAKAQVKTETTGPPHYTDQPSTSQIAYTSLSLPHYGSAPPSISRPQFDYSDHQPSGPPYGHAGQASG
 LYSAFSYMGPSQRPLYTAISDPSPSGPQSHSPHWEPVYTTLSRP

TRTRPLE – GFP Tag – V

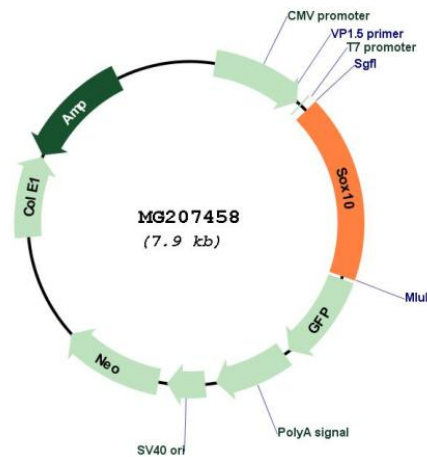
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC025171

ORF Size: 1400 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:	<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:	<u>BC025171</u> , <u>AAH25171</u>
RefSeq Size:	2557 bp
RefSeq ORF:	1400 bp
Locus ID:	20665
Cytogenetics:	15 37.7 cM
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]