

Product datasheet for **RG200757**

SOX2 (NM_003106) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SOX2 (NM_003106) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SOX2
Synonyms:	ANOP3; MCOPS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200757 representing NM_003106 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTACAACATGATGGAGACGGAGCTGAAGCCGCGGGCCCGCAGCAAACCTCGGGGGCGGGCGGGCA
ACTCCACCGCGGGCGGGCGGGCAACCAGAAAAACAGCCCGACCGCGTCAAGCGGCCCATGAATGC
CTTCATGGTGTGGTCCCAGGGCAGCGGCAGCAAGATGGCCAGGAGAACCCCAAGATGCACAACCTCGGAG
ATCAGCAAGCGCCTGGGCGCGAGTGAAACTTTGTCCGAGACGGAGAAGCGGCCGTTTCATCGACGAGG
CTAAGCGGCTGCGAGCGCTGCACATGAAGGAGCACCCGATTATAAATACCGGCCCGGGCGAAAACCAA
GAGCCTCATGAAGAAGGATAAGTACACGCTGCCCGCGGGCTGCTGGCCCCGGCGCAATAGCATGGCG
AGCGGGTTCGGGTGGGCGCGGCTGGGCGCGGGCGTGAACCAGCGCATGGACAGTTACCGGCACATGA
ACGGCTGGAGCAACGGCAGCTACAGCATGATGCAGGACCAGCTGGGCTACCCGACGACCCGGGCTCAA
TGCGCACGGCGCAGCGCAGATGCAGCCATGCACCGCTACGACGTGAGCGCCCTGCAGTACAACCTCCATG
ACCAGCTCGCAGACCTACATGAACGGCTCGCCACCTACAGCATGTCTACTCGCAGCAGGGCACCCCTG
GCATGGCTCTGGCTCCATGGGTTCCGTTGGTCAAGTCCGAGGCCAGCTCCAGCCCCCTGTGGTTACCTC
TTCCCTCCCACTCCAGGGCGCCCTGCCAGGCCGGGACCTCCGGGACATGATCAGCATGTATCTCCCCGGC
GCCGAGGTGCCGAACCCGCCGCCCCAGCAGACTTACATGTCCAGCACTACCAGAGCGGCCCGGTGC
CCGGCACGGCCATTAACGGCACACTGCCCTCTCACACATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG200757 representing NM_003106
 Red=Cloning site Green=Tags(s)

MYNMMETELKPPGPQQTSGGGGNSTAAAAGGNQKNSPDRVKRPMNAFMVWSRGQRKMAQENPKMHNSE
 ISKRLGAEWKLLSETEKRPFIDEAKRLRALHMKEHPDYKYRPRRKTKTLMKKDKYTLPGLLAPGGNSMA
 SGVGVGAGLGAGVNQRMSYAHMNGWSNGSYSMMQDQLGYPQHPGLNAHGAAQMOPMHRVDVSALQYNM
 TSSQTYMNGSPTYSMSYSQQGTPGMALGSMGSVVKSEASSPPVVTSSSHSRAPCQAGDLRDMISMYLPG
 AEVPEPAAPSR LHMSQHYSQGPVPGTAINGTLPLSHM

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003106

ORF Size: 951 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: [NM_003106.2](#), [NP_003097.1](#)

RefSeq Size: 2518 bp

RefSeq ORF: 954 bp

Locus ID: 6657

UniProt ID: [P48431](#)

Cytogenetics: 3q26.33

Protein Families: Adult stem cells, Cancer stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

Gene Summary: This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The product of this gene is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2OT). [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG200757