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Product datasheet for RG228253

SHOX2 (NM_001163678) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SHOX2
Synonyms:	OG12; OG12X; SHOT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG228253 representing NM_001163678
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGAACTTACGGCGTTCGTCTCCAAGTCTTTTGACCAGAAAGTGAAGGAGAAGAAGGAGGCGATCA
CGTACCGGGAGGTGCTGGAGAGCGGGCCGCTGCGCGGGGCCAAGGAGCCGACCGGCTGCACCGAGGCGGG
CCGCGACGACCGCAGCAGCCCGGCAGTCCGGGCGGCCGGCGGAGGCGGCGGCGGAGGAGGCGGAGGCGGC
GGCGGAGGAGGCGGAGGAGGTGTAGGAGGAGGAGGAGCAGGCGGAGGAGCTGGAGGAGGGCGCTCTCCCG
TCCGGGAGCTGGACATGGGCGCCGCCGAGAGAAGCAGGGAGCCGGGCAGCCCGCGACTGACGGAGGTGTC
CCCGGAGCTGAAAGATCGCAAAGAGGATGCGAAAGGGATGGAGGACGAAGGCCAGACCAAAATCAAGCAG
AGGCGAAGTCGGACCAATTTCACCCTGGAACAACTCAATGAGCTGGAGAGGCTTTTTGACGAGACCCACT
ATCCCGACGCCTTCATGCGAGAGGAACTGAGCCAGCGACTGGGCCTGTCGGAGGCCCGAGTGCAGGTTTG
GTTTCAAAATCGAAGAGCTAAATGTAGAAAACAAGAAAATCAACTCCATAAAGGTGTTCTCATAGGGGCC
GCCAGCCAGTTTGAAGCTTGTAGAGTCGCACCTTATGTCAACGTAGGTGCTTTAAGGATGCCATTTCAGC
AGGTTCAGGCGCAGCTGCAGCTGGACAGCGCTGTGGCGCACGCGCACCACCACCTGCATCCGCACCTGGC
CGCGCACGCGCCCTACATGATGTTCCCAGCACCGCCCTTCGGACTGCCGCTCGCCACGCTGGCCGCGGAT
TCGGCTTCCGCCGCCTCGGTAGTGGCGGCCGCAGCAGCCGCCAAGACCACCAGCAAGAACTCCAGCATCG
CCGATCTCAGACTGAAAGCCAAAAAGCACGCCGCAGCCCTGGGTCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

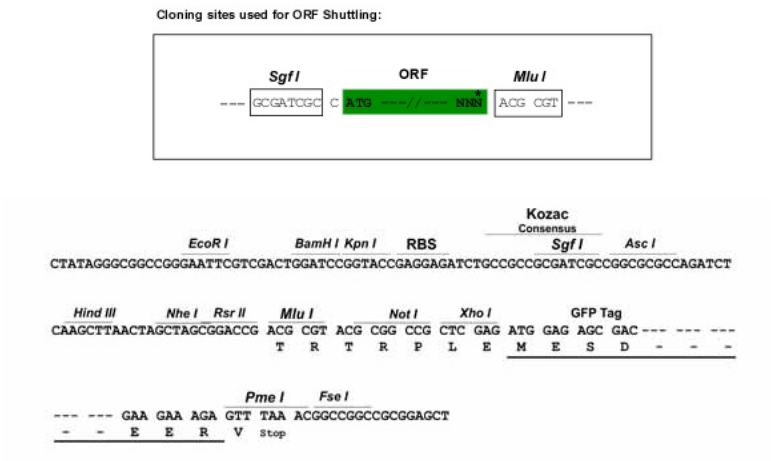
>RG228253 representing NM_001163678
Red=Cloning site Green=Tags(s)

MEELTAFVSKSFDQKVKEKKEAITYREVLESGPLRGAKEPTGCTEAGRDDRSSPAVRAAGGGGGGGGGG
GGGGGGGVGGGGAGGGAGGGRSPVRELDMGAAERSREPGSPRLTEVSPELKDRKEDAKGMEDEGQTKIKQ
RRSRTNFTLEQLNELERLFDETHYPDAFMREELSQRLGLSEARVQVWFQNRRAKCRKQENQLHKGVLIGA
ASQFEACRVAPYVNVGALRMPFQQVQAQLQLDSAVAHAHHHLHPHLAAHAPYMMFPAPPFGLPLATLAAD
SASAASVVAAAAAAKTTSKNSSIADLRLKAKKHAAALGL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001163678

ORF Size: 957 bp

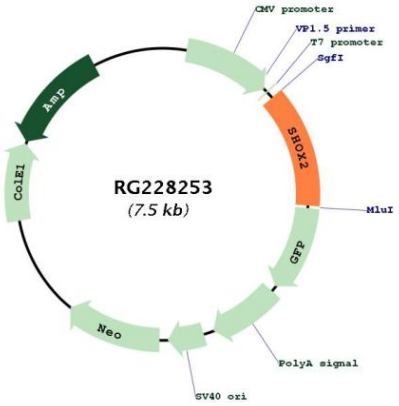
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001163678.2
RefSeq Size:	3125 bp
RefSeq ORF:	960 bp
Locus ID:	6474
UniProt ID:	O60902
Cytogenetics:	3q25.32
Protein Families:	Transcription Factors
Gene Summary:	This gene is a member of the homeobox family of genes that encode proteins containing a 60-amino acid residue motif that represents a DNA binding domain. Homeobox genes have been characterized extensively as transcriptional regulators involved in pattern formation in both invertebrate and vertebrate species. Several human genetic disorders are caused by aberrations in human homeobox genes. This locus represents a pseudoautosomal homeobox gene that is thought to be responsible for idiopathic short stature, and it is implicated in the short stature phenotype of Turner syndrome patients. This gene is considered to be a candidate gene for Cornelia de Lange syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2009]

Product images:



Circular map for RG228253