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Product datasheet for RC203465

SIX1 (NM_005982) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	SIX1
Synonyms:	BOS3; DFNA23; TIP39
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203465 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGATGCTGCCGTCGTTTGGCTTTACGCAGGAGCAAGTGGCGTGCGTGTGCGAGGTTCTGCAGCAAG
GCGGAAACCTGGAGCGCCTGGGCAGGTTCCTGTGGTCACTGCCCGCCTGCGACCACCTGCACAAGAACGA
GAGCGTACTCAAGGCCAAGGCGGTGGTCGCCTTCCACCGCGGCAACTTCCGTGAGCTCTACAAGATCCTG
GAGAGCCACCAGTTCTCGCCTCACAACCACCCCAAACTGCAGCAACTGTGGCTGAAGGCGCATTACGTGG
AGGCCGAGAAGCTGTGCGGCCGACCCCTGGGCGCCGTGGGCAAATATCGGGTGCGCCGAAAATTTCCACT
GCCGCGCACCATCTGGGACGGCGAGGAGACCAGCTACTGCTTCAAGGAGAAGTCGAGGGGTGTCCTGCGG
GAGTGGTACGCGCACAATCCCTACCCATCGCCGCGTGAGAAGCGGGAGCTGGCCGAGGCCACCGGCCTCA
CCACCACCCAGGTCAGCAACTGGTTTAAGAACCGGAGGCAAAGAGACCGGGCCGCGGAGGCCAAGGAAAG
GGAGAACACCGAAAACAATAACTCCTCCTCCAACAAGCAGAACCAACTCTCTCCTCTGGAAGGGGGCAAG
CCGCTCATGTCCAGCTCAGAAGAGGAATTCTCACCTCCCCAAAGTCCAGACCAGAACTCGGTCCTTCTGC
TGCAGGGCAATATGGGCCACGCCAGGAGCTCAAACTATTCTCTCCCGGGCTTAACAGCCTCGCAGCCCAG
TCACGGCCTGCAGACCCACCAGCATCAGCTCCAAGACTCTCTGCTCGGCCCCCTCACCTCCAGTCTGGTG
GACTTGGGGTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC203465 protein sequence
Red=Cloning site Green=Tags(s)

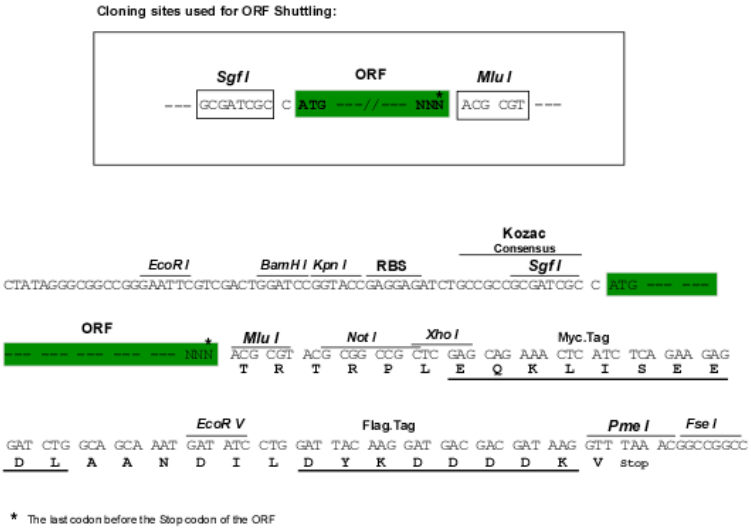
MSMLPSFGFTQEQVACVCEVLQQGGNLERLGRFLWSLPACDHLHKNESVLKAKAVVAFHRGNFRELYKIL
ESHQFSPHNHPKLQQLWLKAHYVEAEKLCGRPLGAVGKYRVRRKFPLPRTIWDGEETSYCFKEKSRGVLR
EWYAHNPYPSPREKRELAEATGLTTTQVSNWFKNRRQRDRAAEAKERENTENNNSSSNKQNQLSPLEGGK
PLMSSSEEEFSPPQSPDQNSVLLLQGNMGHARSSNYSLPGLTASQPSHGLQTHQHQLQDSLLGPLTSSLV
DLGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6079_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005982

ORF Size: 852 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_005982.4

RefSeq Size: 2687 bp

RefSeq ORF: 855 bp

Locus ID: 6495

UniProt ID: Q15475

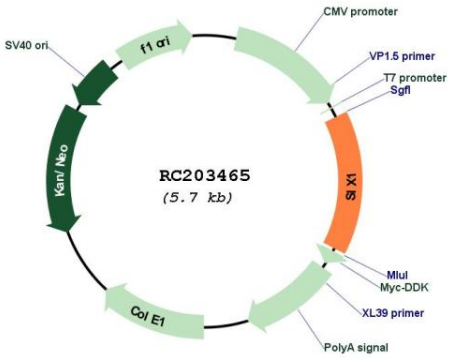
Cytogenetics: 14q23.1

Protein Families: Transcription Factors

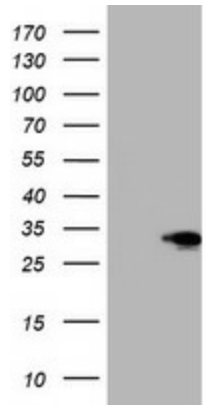
MW: 32.2 kDa

Gene Summary: The protein encoded by this gene is a homeobox protein that is similar to the Drosophila 'sine oculis' gene product. This gene is found in a cluster of related genes on chromosome 14 and is thought to be involved in limb development. Defects in this gene are a cause of autosomal dominant deafness type 23 (DFNA23) and branchiootic syndrome type 3 (BOS3). [provided by RefSeq, Jul 2008]

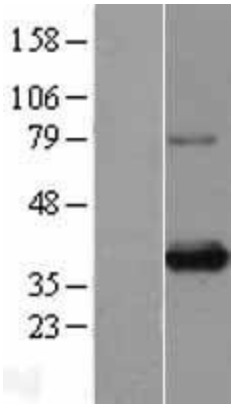
Product images:



Circular map for RC203465



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SIX1 (Cat# RC203465, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SIX1(Cat# [TA504057]). Positive lysates [LY401814] (100ug) and [LC401814] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401814]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203465 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).