

## Product datasheet for **RC214143**

### SIX homeobox 4 (SIX4) (NM\_017420) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SIX homeobox 4 (SIX4) (NM_017420) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIX homeobox 4
Synonyms:	AREC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC214143 representing NM\_017420  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCTCTTCTCCCCACCGGCAGATCGCAAGTGCGGCGGACATCAAGCAAGAGAATGGGATGGAAA  
 GCGCCTCGGAAGGGCAGGAGGCGCACCGAGAAGTGGCGGGGGCGCGCGGTAGGCTGAGCCCCCGGC  
 TCCAGCCCTTTTCCCTGGAGCCGGGGACGCCGCGACCGCTGCCGCCAGGGTGAAGGAGAGGAAGGG  
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 GGCTCCTCATTAGTAAATGTATCTCCTCAACTCACAATTTTTCTCTCAGTCCCTTACACTACTAAATCCC  
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 CATCTGTGAGCAACACTAACTATGCAACTCTTCAGAACTGCTCCCTTATTACTGGTCAAGACCTATTGTC  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214143 representing NM\_017420  
Red=Cloning site Green=Tags(s)

MSSSSPTGQIASAADIKQENGMESASEGQEAHREVAGGAAVGLSPPAPAPFPLEPGDAATAARVSGEEG  
AVAAAAAGAAADQVLHSELLGRHHHAAAAAAQTPLAFSPDHVACVCEALQQGGNLDRLARFLWSLPQSD  
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ANSQFLNGSIGFSPLQLPPVSVAASQGNISVSSSTSDGSTFTSESTTVQQGKVFSSLAPSAVVYTPNT  
GQTIGSVKQEGLESLVFSQLMPVNQNAQVNANLSSENISGSLHPLASSLVNVSPTHNFSLSPSTLLNP  
TELNRDIADSQPMSAPVASKSTVTSVSNYATLQNCSLITGQDLLSVPMTQAALGEIVPTAEDQVGHPS  
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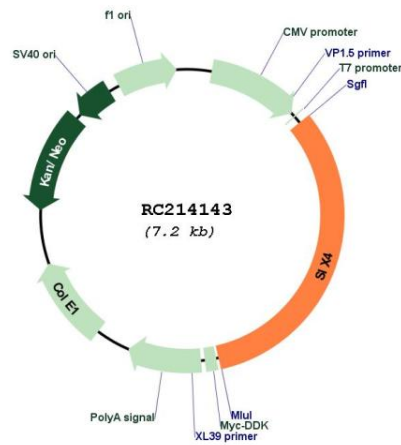
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8029\\_c08.zip](https://cdn.origene.com/chromatograms/mk8029_c08.zip)

**Restriction Sites:** Sgfl-Mlul

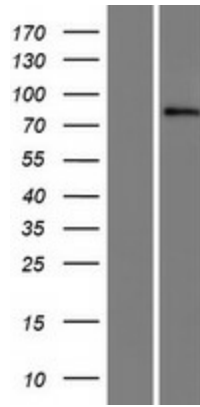


<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_017420.5</u>
<b>RefSeq Size:</b>	6214 bp
<b>RefSeq ORF:</b>	2346 bp
<b>Locus ID:</b>	51804
<b>UniProt ID:</b>	<u>Q9UIU6</u>
<b>Cytogenetics:</b>	14q23.1
<b>MW:</b>	82.8 kDa
<b>Gene Summary:</b>	This gene encodes a member of the homeobox family, subfamily SIX. The drosophila homolog is a nuclear homeoprotein required for eye development. Studies in mouse show that this gene product functions as a transcription factor, and may have a role in the differentiation or maturation of neuronal cells. [provided by RefSeq, May 2010]

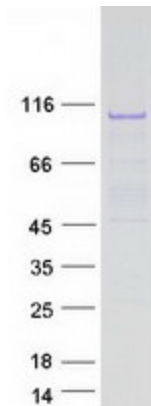
**Product images:**



Circular map for RC214143



Western blot validation of overexpression lysate (Cat# [LY413778]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214143 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SIX4 protein (Cat# [TP314143]). The protein was produced from HEK293T cells transfected with SIX4 cDNA clone (Cat# RC214143) using MegaTran 2.0 (Cat# [TT210002]).