

## Product datasheet for **MR223455**

### Hopx (NM\_175606) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hopx (NM_175606) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hopx
Synonyms:	1110018K11Rik; 1200015P04Rik; 2300002F06Rik; A1848177; AW490897; Cameo; Hdop; Hod; Hop
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR223455 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGGCGCAGACCGCGAGCGGCCACGGAGGACCAGGTGGAGATCCTGGAGTACAACCTCAACAAGG  
TCAACAAGCACCCGGACCCACCACGCTGTGCCTCATCGAGCCGAGCGGGTCTCACGGAGGAGCAGAC  
GCAGAAATGGTTTAAGCAGCGCCTGGCAGAGTGGCGGGTCTCAGAAGGCTTGCCTTCGGAATGCAGATCT  
GTTACGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>MR223455 protein sequence Red=Cloning site Green=Tags(s)
	MSAQTASGPTEDQVEILEYFNKVNKHPDPTLLCLIAAEAGL TEEQTQKWFQRLAEWRRSEGLPSECRS VTD

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:	Sgfl-MluI
--------------------	-----------



[View online »](#)

## Cloning Scheme:



ACCN: NM\_175606

ORF Size: 222 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\\_175606.3](#), [NP\\_783199.1](#)

RefSeq Size: 1265 bp

RefSeq ORF: 222 bp

Locus ID: 74318

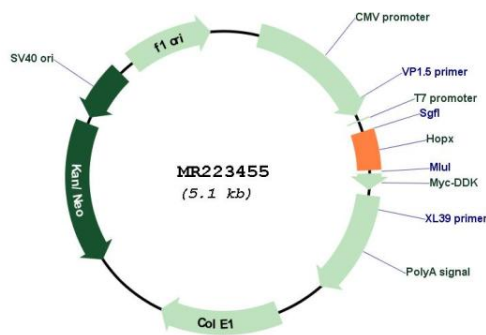
UniProt ID: [Q8R1H0](#)

Cytogenetics: 5 C3.3

MW: 8.3 kDa

**Gene Summary:** Atypical homeodomain protein which does not bind DNA and is required to modulate cardiac growth and development. Acts via its interaction with SRF, thereby modulating the expression of SRF-dependent cardiac-specific genes and cardiac development. Prevents SRF-dependent transcription either by inhibiting SRF binding to DNA or by recruiting histone deacetylase (HDAC) proteins that prevent transcription by SRF. Overexpression causes cardiac hypertrophy (PubMed:12297045, PubMed:12297046). Acts as a co-chaperone for HSPA1A and HSPA1B chaperone proteins and assists in chaperone-mediated protein refolding (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR223455