

**Table S3.** Sequence of the Hoxa-5 wild type, sequence of Hoxa-5 truncated gene and protein and primer design and methodology employed for the construction of the transfection vectors.

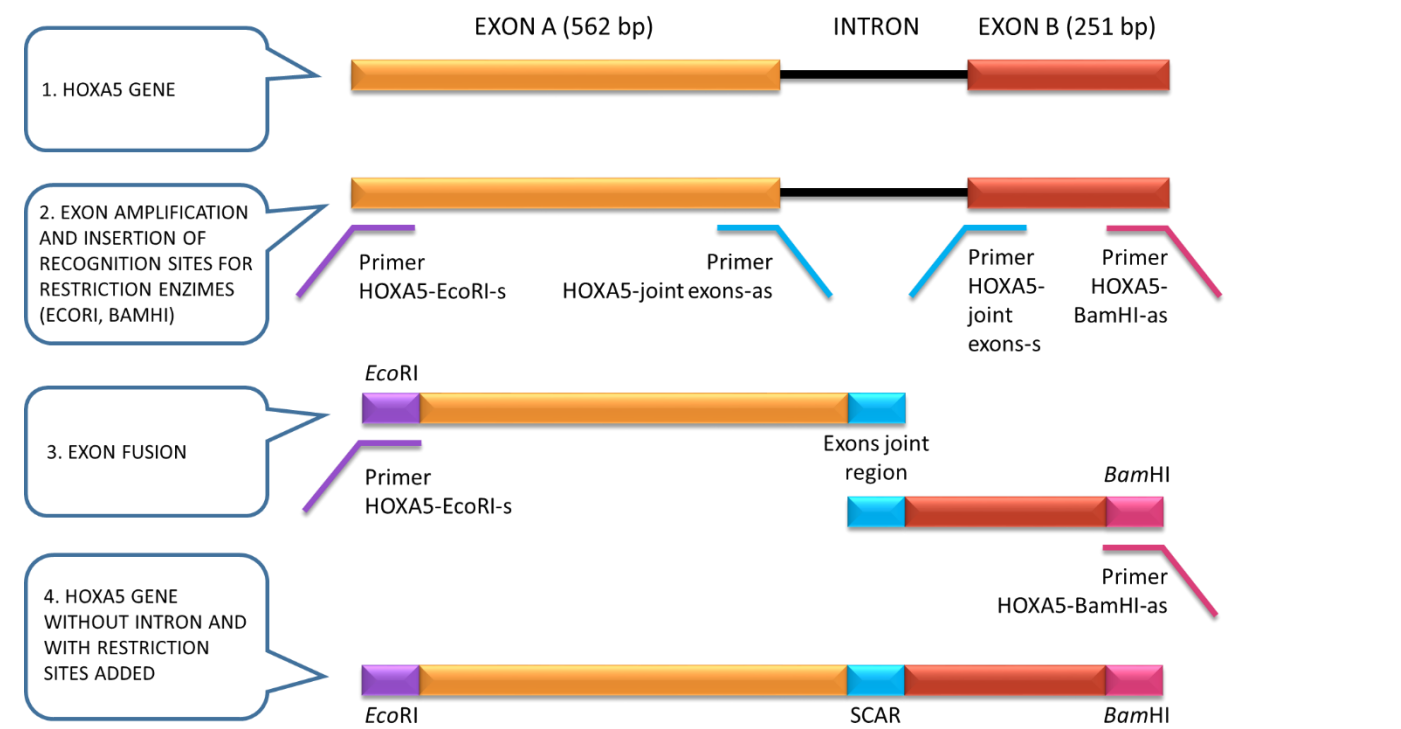
**Hoxa-5 gene sequence**

ATGAGCTCTTATTTTGTAAACTCATTTTGCGGTCGCTATCCAAATGGCCCGGACTACCAGTTGCATAATTATGGAGATCA  
TAGTTCCGTGAGCGAGCAATTCAGGGACTCGGCGAGCATGCACTCCGGCAGGTACGGCTACGGCTACAATGGCATGGA  
TCTCAGCGTCGGCCGCTCGGGCTCCGGCCACTTTGGCTCCGGAGAGCGCGCCCGCAGCTACGCTGCCAGCGCCAGCGC  
GGCGCCCGCCGAGCCCAGGTACAGCCAGCCGGCCACGTCCACGCACTCTCCTCAGCCCGATCCGCTGCCCTGCTCCGC  
CGTGCCCCCTCGCCCGCAGCGACAGCCACCACGGCGGGAAAACTCCCTAAGCAACTCCAGCGGCGCCTCGGCCG  
ACGCCGGCAGCACCCACATCAGCAGCAGAGAGGGGGTTGGCACGGCGTCCGGAGCCGAGGAGGACGCCCCCTGCCAG  
CAGCGAGCAGGCGAGTGGCAGAGCGAGCCGAGCCCGGCGCCCGCCCAACCCCAGATCTACCCCTGGATGCGCA  
AGCTGCACATAAGTCATGACAACATAGGCGGCCCGGAAGGCAAAAGGGCCCGGACGGCCTACACGCGCTACCAGACC  
CTGGAGCTGGAGAAGGAGTTCCAATTCAACCGTTACCTGACCCGCAGAAGGAGGATTGAAATAGCACATGCTCTTTGC

PRIMER		SEQUENCE	Tm
EXON A	FORWARD	5'-AAAAAAGAATTCGCCGCCACCATGAGCTCTTATTTTGTAAACTCATTT	69.1
	REVERSE	5'-GCCTATGTTGTCATGACTTATGTGCAGCTTGCGCATCCA-3'	67.6
EXON B	FORWARD	5'-CACATAAGTCATGACAACATAGGCGGCCCGGAAGGC-3'	69.0
	REVERSE	5'-AAAAAAGGATCCTCAGGGACGGAAGGCCCTCCTG-3'	69.1
EXON FUSION	FORWARD	5'-AAAAAAGAATTCGCCGCCACCATGAGCTCTTATTTTGTAAACTCATTT	69.1
	REVERSE	5'-AAAAAAGGATCCTCAGGGACGGAAGGCCCTCCTG-3'	69.1

CTCTCCGAGAGACAAATTAAATCTGGTTCCAAAACCGGAGAATGAAGTGGAAGGATAATAAGCTGAAAAGCAT  
GAGCATGGCCGCGGCAGGAGGGGCCTTCGTCCTGA

**Primer complete hoxa-5 gene amplification**



Hoxa-5 protein sequence

MSSYFVNSFCGRYPNGPDYQLHNYGDHSSVSEQFRDSASMHSGRYGYGYNGMDLSVGRSGSGHFGSGERARSYAASASAAPAE  
PRYSQPATSTHSPQPDPLPCSAVAPSPGSDSHHGKNSLSNSSGASADAGSTHSSREGVGTASGAEDAPASSEQASAQSEPSA  
PPAQPQIYPWMRKLHISHDNIGGPEGKRARTAYTRYQTLELEKEFHENRYLTRRRRIEIAHALCLSERQIKIWFONRRMKWKKDNK  
LKSMSMAAAGGAFRP (Homeobox underlined)

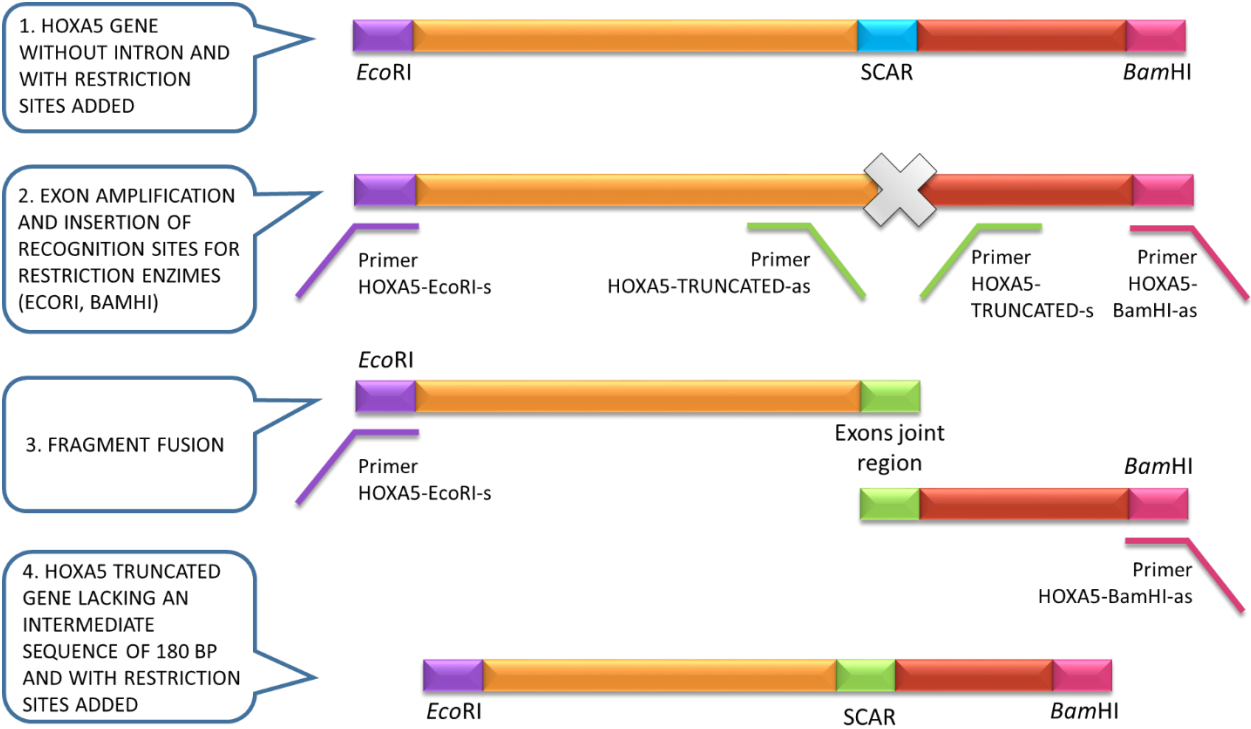
Truncated hoxa-5 gene sequence

ATGAGCTCTTATTTTGTAAACTCATTTTGCGGTCGCTATCCAAATGGCCCGGACTACCAGTTGCATAATTATGGAGATCAT  
AGTTCCGTGAGCGAGCAATTCAGGGACTCGGCGAGCATGCACTCCGGCAGGTACGGCTACGGCTACAATGGCATGGATC  
TCAGCGTCGGCCGCTCGGGCTCCGGCCACTTTGGCTCCGAGAGCGCGCCCGCAGCTACGCTGCCAGCGCCAGCGCGGC

Primer	Sequence	Tm
FRAGMENT 1	5'- FORWARD AAAAAAGAATTCGCCGCCACCATGAGCTCTTATTTTGTAAACTCA	69.1
	TTTTGCGGTC-3'	
	REVERSE 5'-GCTTATTATCGCCGCCTATGTTGTCATGACTTATGTGC-3'	65.5
FRAGMENT 2	FORWARD 5'-CATAGGCGGCGATAATAAGCTGAAAAGCATGAGCATGGCC-3'	68.6
	REVERSE 5'-AAAAAAGGATCCTCAGGGACGGAAGGCCCTCCTG-3'	69.1
FRAGMENT FUSION	5'- FORWARD AAAAAAGAATTCGCCGCCACCATGAGCTCTTATTTTGTAAACTCA	69.1
	TTTTGCGGTC-3'	
	REVERSE 5'-AAAAAAGGATCCTCAGGGACGGAAGGCCCTCCTG-3'	69.1

GCCCGCCGAGCCCAGGTACAGCCAGCCGGCCACGTCCACGCACTCTCCTCAGCCCCGATCCGCTGCCCTGCTCCGCCGTG  
GCCCCCTCGCCCGCAGCGACAGCCACCACGGCGGGA AAAA ACTCCCTAAGCAACTCCAGCGGCGCCTCGGCCGACGCC  
GGCAGCACCCACATCAGCAGCAGAGAGGGGGTTGGCACGGCGTCCGGAGCCGAGGAGGACGCCCCCTGCCAGCAGCGA  
GCAGGCGAGTGCGCAGAGCGAGCCGAGCCCGGCGCCGCCGCCAACCCAGATCTACCCCTGGATGCGCAAGCTGCA  
CATAAGTCATGACAACATAGGCGGCGATAATAAGCTGAAAAGCATGAGCATGGCCGCGGCAGGAGGGGCCTTCCGTCC  
CTGA

Primer truncated hoxa-5 gene amplification



**Hoxa-5 truncated protein sequence**

MSSYFVNSFCGRYPNGPDYQLHNYGDHSSVSEQFRDSASMHSGRYGYGYNGMDLSVGRSGSGHFGSGERARSYAASASAAPAE  
PRYSQPATSTHSPQPDPLPCSAVAPSPGSDSHHGKNSLSNSSGASADAGSTHISSREGVGTASGAEDAPASSEQASAQSEPSA  
PPAQPQIYPWMRKLHISHDNIGGDNKLKSMSMAAAGGAFRP

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