

Figure S6

FGF6 Mutation Plasmid Structure

M1 Plasmid [GAG -> TAG] **E172X**

```
ATGGCCCTGGACAGAAACTGTTCATCACTATGTCCCAGGGAGCA  
GGACGTCTGCAGGGCACGCTGTGGGCTCTCGTCTTCCTAGGCATCC  
TAGTGGGCATGGTGGTGCCTCGCCTGCAGGCACCCGTGCCAAC  
ACACGCTGCTGGACTCGAGGGGCTGGGCACCCCTGCTGTCCAGGT  
CTCGCGCCGGCTAGCTGGAGAGATTGCCGGGTGAAGTGGAAA  
GTGGCTATTGGTGGGATCAAGCGGCAGCGGAGGGCTACTGCA  
ACGTGGGCATCGGCTTCACCTCAGGTGCTCCCGACGGCCGG  
TCAGCGGGACCCACGAGGAGAACCCCTACAGCCTGCTGGAAATT  
CCACTGTGGAGCGAGGCCTGGTGAGTCTTGGAGTGAGAAGTG  
CCCTCTCGTTGCCATGAACAGTAAGGAAGATTGTACCGAACGCC  
CAGCTCCAAGAAGAATGCAAGTTAGAGAAACCCCTGCCCAA  
CAATTACAATGCCTACTAGTCAGACTTGTACCAAGGGACCTACATT  
GCCCTGAGCAAATACGGACGGTAAAGCGGGCAGCAAGGTGTC  
CCCGATCATGACTGTCACTCATTCCCTCCAGGATCTAA
```

Point Mutation Construct Primers

F1 : ATACTCGGATCCGCCACCATG
R1 : CTTGGTACAAGTCTGACTAGTAGGCATTG
F2 : CAATGCCTACTAGTCAGACTTGTACCAAG
R2 : GCTGCAGAATTCTTACGTAATCTGGAA

FGF6 Mutation Plasmid Structure

M2 Plasmid [GAC -> GTC] **D174V**

```
ATGGCCCTGGACAGAAACTGTTCATCACTATGTCCCAGGGAGCA  
GGACGTCTGCAGGGCACGCTGTGGGCTCTCGTCTTCCTAGGCATCC  
TAGTGGGCATGGTGGTGCCTCGCCTGCAGGCACCCGTGCCAAC  
ACACGCTGCTGGACTCGAGGGGCTGGGCACCCCTGCTGTCCAGGT  
CTCGCGCCGGCTAGCTGGAGAGATTGCCGGGTGAAGTGGAAA  
GTGGCTATTGGTGGGATCAAGCGGCAGCGGAGGGCTACTGCA  
ACGTGGGCATCGGCTTCACCTCAGGTGCTCCCGACGGCCGG  
TCAGCGGGACCCACGAGGAGAACCCCTACAGCCTGCTGGAAATT  
CCACTGTGGAGCGAGGCCTGGTGAGTCTTGGAGTGAGAAGTG  
CCCTCTCGTTGCCATGAACAGTAAGGAAGATTGTACCGAACGCC  
CAGCTCCAAGAAGAATGCAAGTTAGAGAAACCCCTGCCCAA  
CAATTACAATGCCTACGAGTCAGTCTTGACCAAGGGACCTACATT  
GCCCTGAGCAAATACGGACGGTAAAGCGGGCAGCAAGGTGTC  
CCCGATCATGACTGTCACTCATTCCCTCCAGGATCTAA
```

Point Mutation Construct Primers

F1 : ATACTCGGATCCGCCACCATG
R1 : GGTACAAGACTGACTCGTAGGCATTG
F2 : CTACGAGTCAGTCTTGTACCAAGGG
R2 : GCTGCAGAATTCTTACGTAATCTGGAA

FGF6 Mutation Plasmid Structure

M3 Plasmid [CGG ->CAG] **R188Q**

```
ATGGCCCTGGACAGAAACTGTTCATCACTATGTCCCAGGGAGCA  
GGACGTCTGCAGGGCACGCTGTGGGCTCTCGTCTTCCTAGGCATCC  
TAGTGGGCATGGTGGTGCCTCGCCTGCAGGCACCCGTGCCAAC  
ACACGCTGCTGGACTCGAGGGGCTGGGCACCCCTGCTGTCCAGGT  
CTCGCGCCGGCTAGCTGGAGAGATTGCCGGGTGAAGTGGAAA  
GTGGCTATTGGTGGGATCAAGCGGCAGCGGAGGGCTACTGCA  
ACGTGGGCATCGGCTTCACCTCAGGTGCTCCCGACGGCCGG  
TCAGCGGGACCCACGAGGAGAACCCCTACAGCCTGCTGGAAATT  
CCACTGTGGAGCGAGGCCTGGTGAGTCTTGGAGTGAGAAGTG  
CCCTCTCGTTGCCATGAACAGTAAGGAAGATTGTACCGAACGCC  
CAGCTCCAAGAAGAATGCAAGTTAGAGAAACCCCTGCCCAA  
CAATTACAATGCCTACGAGTCAGACTTGTACCAAGGGACCTACATT  
GCCCTGAGCAAATACGGACAGGTAAGCGGGCAGCAAGGTGTC  
CCCGATCATGACTGTCACTCATTCCCTCCAGGATCTAA
```

Point Mutation Construct Primers

F1 : ATACTCGGATCCGCCACCATG
R1 : CGCTTACCTGTCCGTATTGCTC
F2 : GAGCAAATACGGACAGGTAAAGCG
R2 : GCTGCAGAATTCTTACGTAATCTGGAA