

# Figure S1

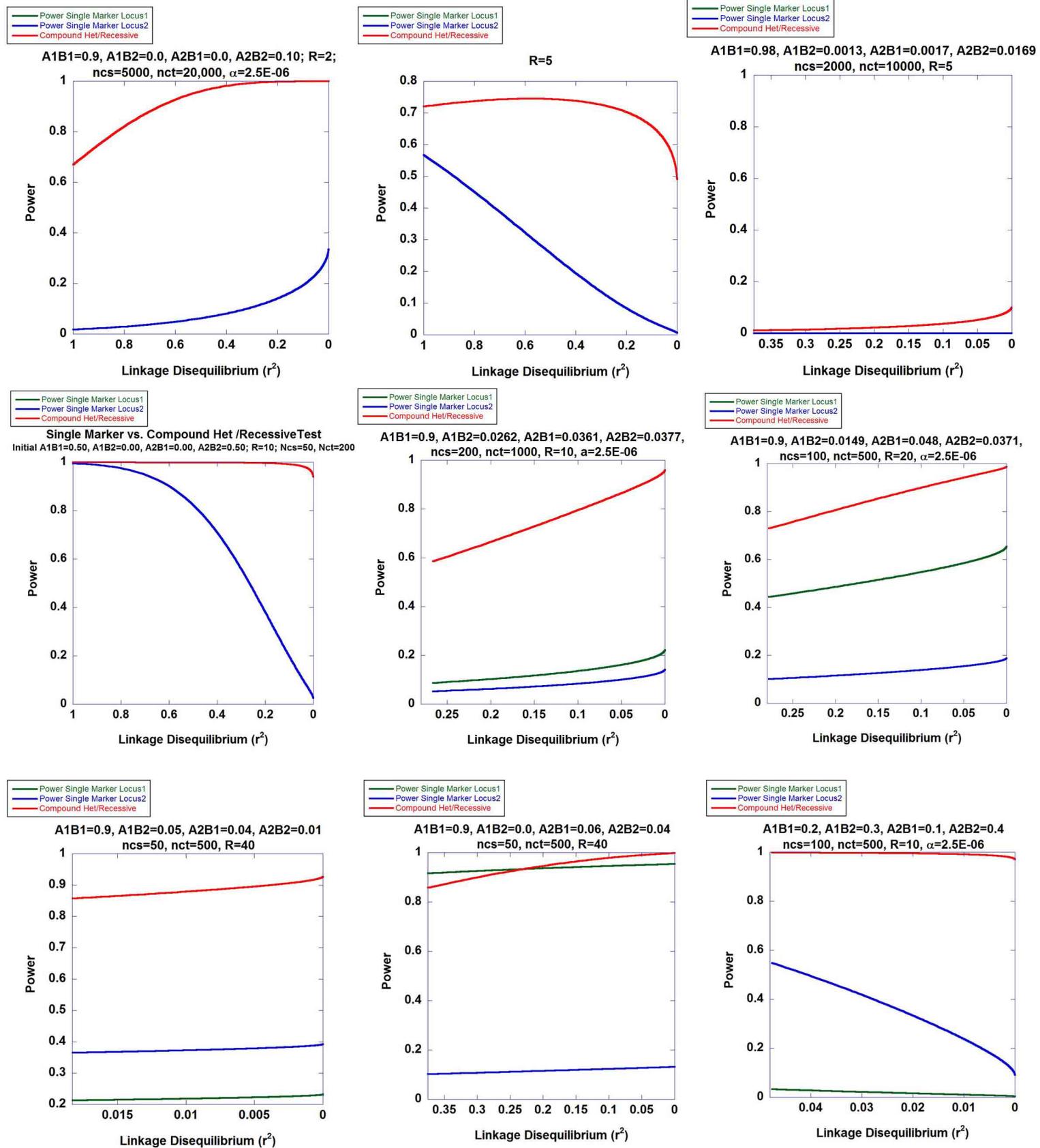


Figure S2

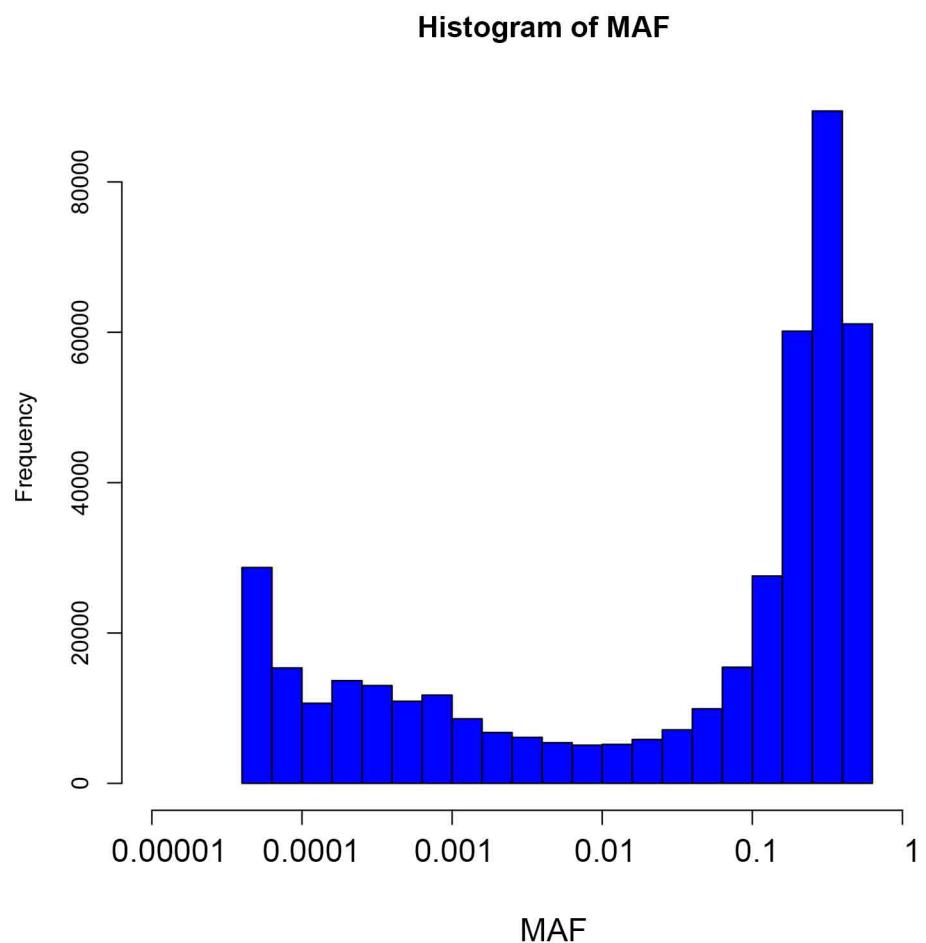
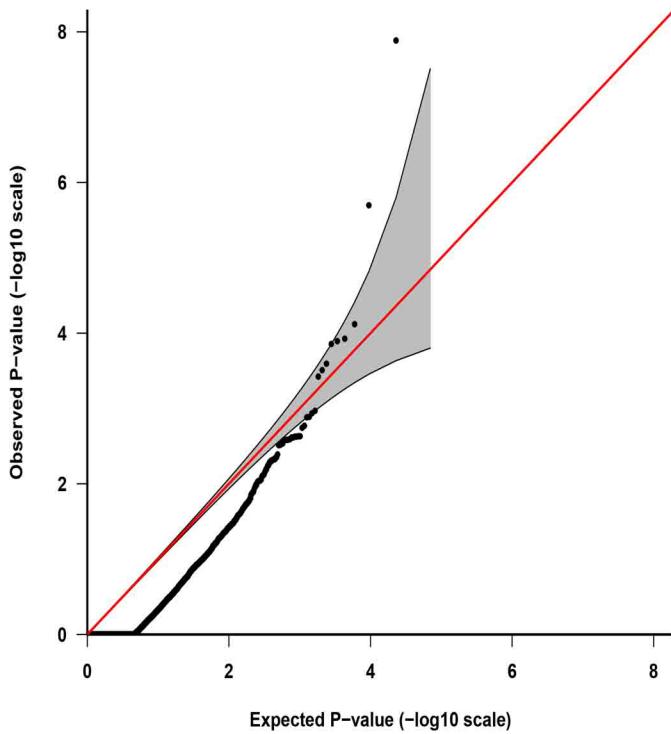
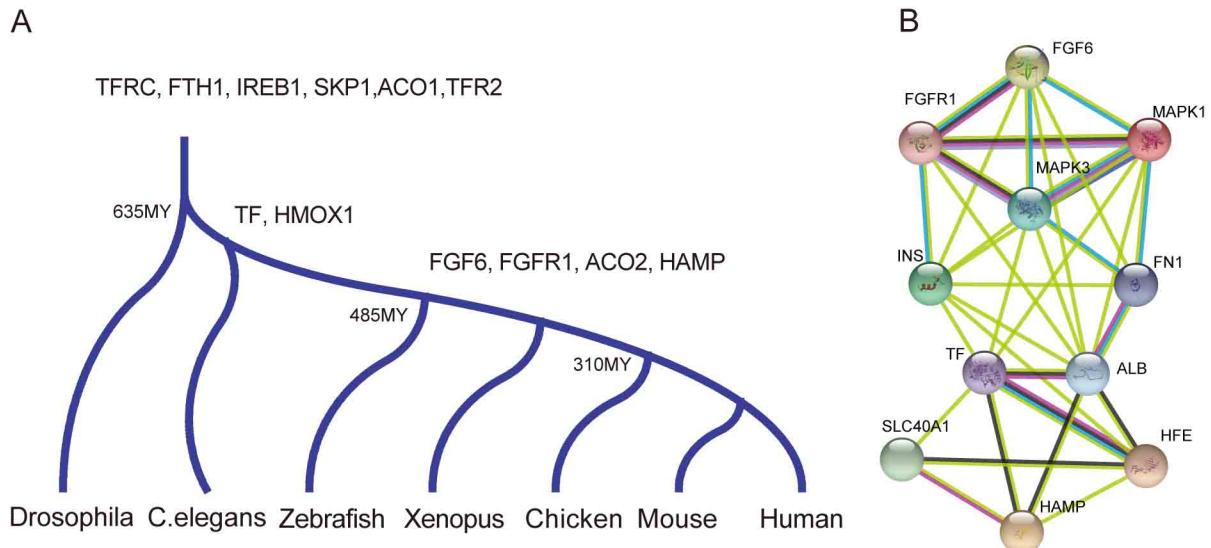


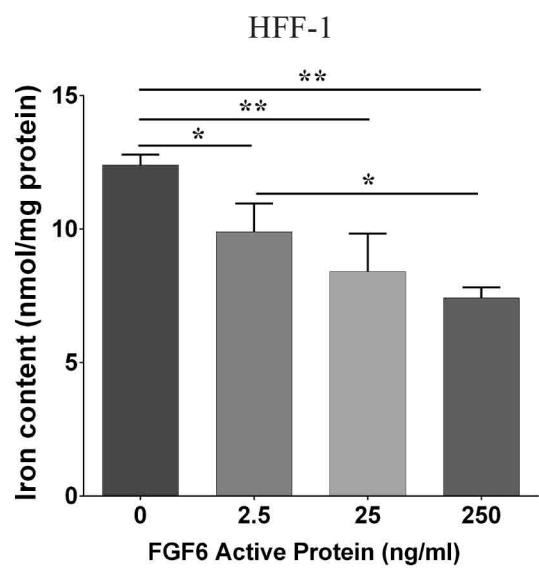
Figure S3



# Figure S4



**Figure S5**



## Figure S6

### FGF6 Mutation Plasmid Structure

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

```
ATGGCCCTGGGACAGAAACTGTTCATCACTATGTCCGGGGAGCA  
GGACGTCTGCAGGGCACGCTGTGGGCTCTCGTCTTCCTAGGCATCC  
TAGTGGGCATGGTGGTGCCTCGCCTGCAGGCACCCGTGCCAAC  
ACACGCTGCTGGACTCGAGGGGCTGGGCACCCCTGCTGTCCAGGT  
CTCGCGCCGGCTAGCTGGAGAGATTGCCGGGGTAAGTGGAA  
GTGGCTATTGGTGGGGATCAAGCGGCAGCGGAGGGCTACTGCA  
ACGTGGGCATCGGCTTCACCTCAGGTGCTCCCCGACGGCCGG  
TCAGCGGGACCCACGAGGAGAACCCCTACAGCCTGCTGGAA  
CCACTGTGGAGCGAGGCCTGGTGAGTCTTGGAGTGAGAAGTG  
CCCTCTCGTTGCCATGAACAGTAAAGGAAGATTGTACCGAACGCC  
CAGCTCCAAGAAGAATGCAAGTTAGAGAAACCCCTGCC  
CAATTACAATGCCTACTAGTCAGACTTGTACCAAGGGACCTACATT  
GCCCTGAGCAAATACGGACGGTAAAGCGGGCAGCAAGGTGTC  
CCCGATCATGACTGTCACTCATTCCCTCCCAGGATCTAA
```

#### Point Mutation Construct Primers

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

### FGF6 Mutation Plasmid Structure

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

```
ATGGCCCTGGGACAGAAACTGTTCATCACTATGTCCGGGGAGCA  
GGACGTCTGCAGGGCACGCTGTGGGCTCTCGTCTTCCTAGGCATCC  
TAGTGGGCATGGTGGTGCCTCGCCTGCAGGCACCCGTGCCAAC  
ACACGCTGCTGGACTCGAGGGGCTGGGCACCCCTGCTGTCCAGGT  
CTCGCGCCGGCTAGCTGGAGAGATTGCCGGGGTAAGTGGAA  
GTGGCTATTGGTGGGGATCAAGCGGCAGCGGAGGGCTACTGCA  
ACGTGGGCATCGGCTTCACCTCAGGTGCTCCCCGACGGCCGG  
TCAGCGGGACCCACGAGGAGAACCCCTACAGCCTGCTGGAA  
CCACTGTGGAGCGAGGCCTGGTGAGTCTTGGAGTGAGAAGTG  
CCCTCTCGTTGCCATGAACAGTAAAGGAAGATTGTACCGAACGCC  
CAGCTCCAAGAAGAATGCAAGTTAGAGAAACCCCTGCC  
CAATTACAATGCCTACGAGTCAGTCTTGTACCAAGGGACCTACATT  
GCCCTGAGCAAATACGGACGGTAAAGCGGGCAGCAAGGTGTC  
CCCGATCATGACTGTCACTCATTCCCTCCCAGGATCTAA
```

#### Point Mutation Construct Primers

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

### FGF6 Mutation Plasmid Structure

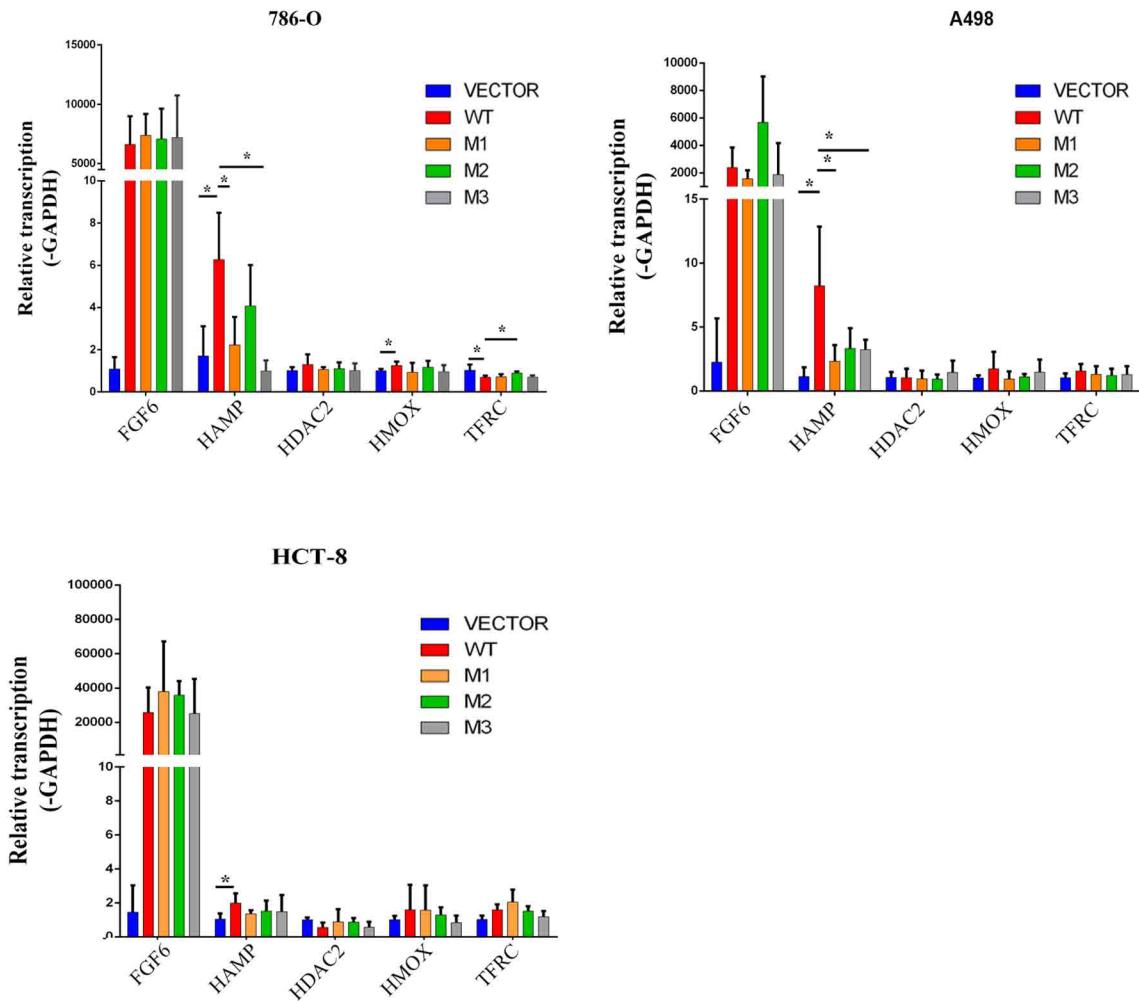
#### M3 Plasmid [CGG ->CAG] **R188Q**

```
ATGGCCCTGGGACAGAAACTGTTCATCACTATGTCCGGGGAGCA  
GGACGTCTGCAGGGCACGCTGTGGGCTCTCGTCTTCCTAGGCATCC  
TAGTGGGCATGGTGGTGCCTCGCCTGCAGGCACCCGTGCCAAC  
ACACGCTGCTGGACTCGAGGGGCTGGGCACCCCTGCTGTCCAGGT  
CTCGCGCCGGCTAGCTGGAGAGATTGCCGGGGTAAGTGGAA  
GTGGCTATTGGTGGGGATCAAGCGGCAGCGGAGGGCTACTGCA  
ACGTGGGCATCGGCTTCACCTCAGGTGCTCCCCGACGGCCGG  
TCAGCGGGACCCACGAGGAGAACCCCTACAGCCTGCTGGAA  
CCACTGTGGAGCGAGGCCTGGTGAGTCTTGGAGTGAGAAGTG  
CCCTCTCGTTGCCATGAACAGTAAAGGAAGATTGTACCGAACGCC  
CAGCTCCAAGAAGAATGCAAGTTAGAGAAACCCCTGCC  
CAATTACAATGCCTACGAGTCAGACTTGTACCAAGGGACCTACATT  
GCCCTGAGCAAATACGGACAGGTAAGCGGGCAGCAAGGTGTC  
CCCGATCATGACTGTCACTCATTCCCTCCCAGGATCTAA
```

#### Point Mutation Construct Primers

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

Figure S7



**Figure S8**

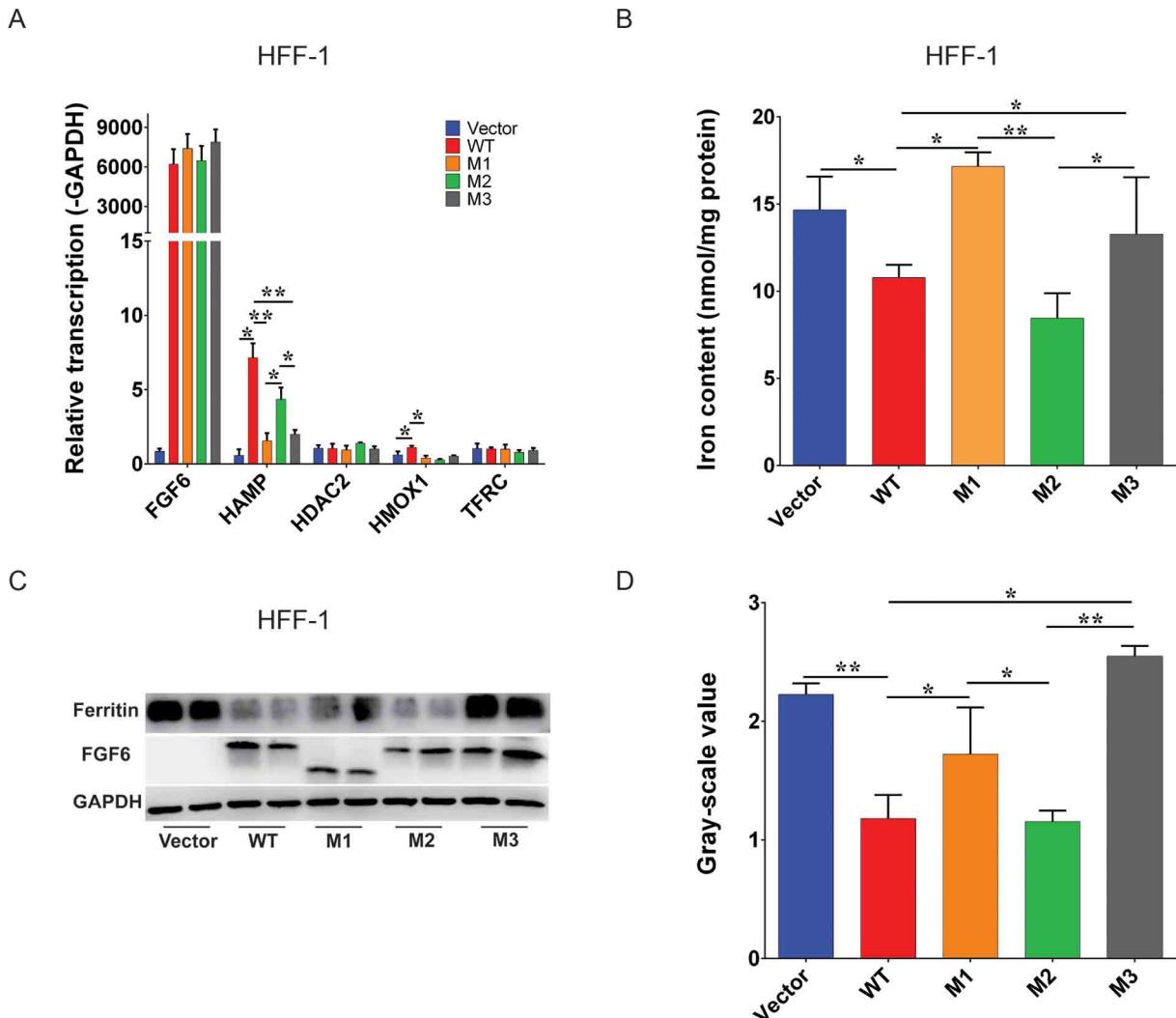


Figure S9

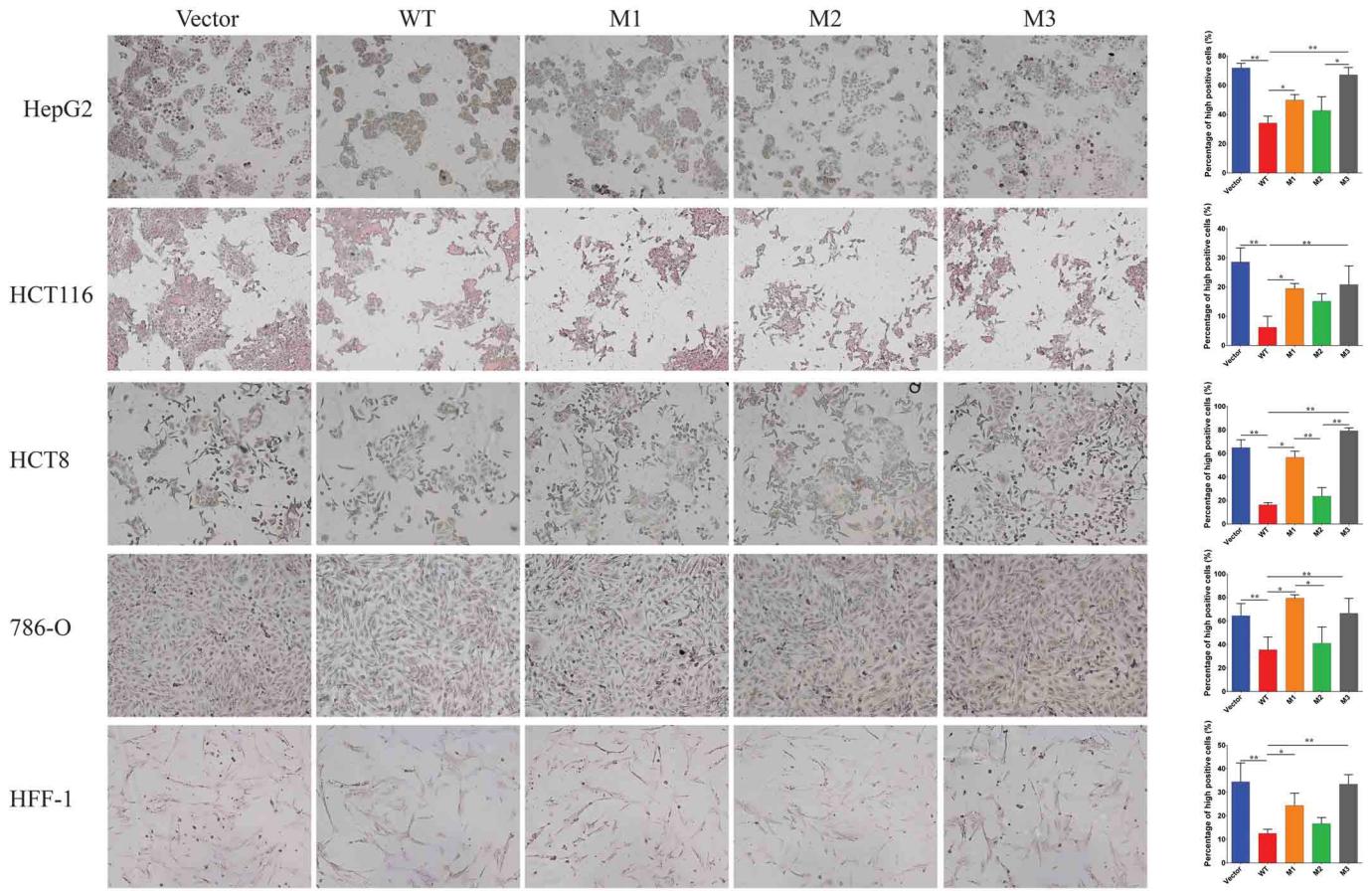
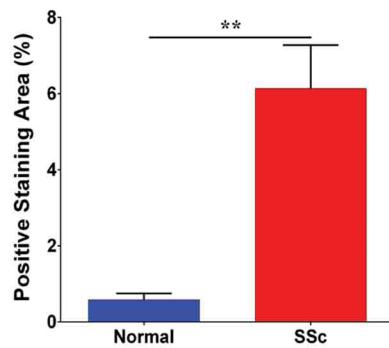
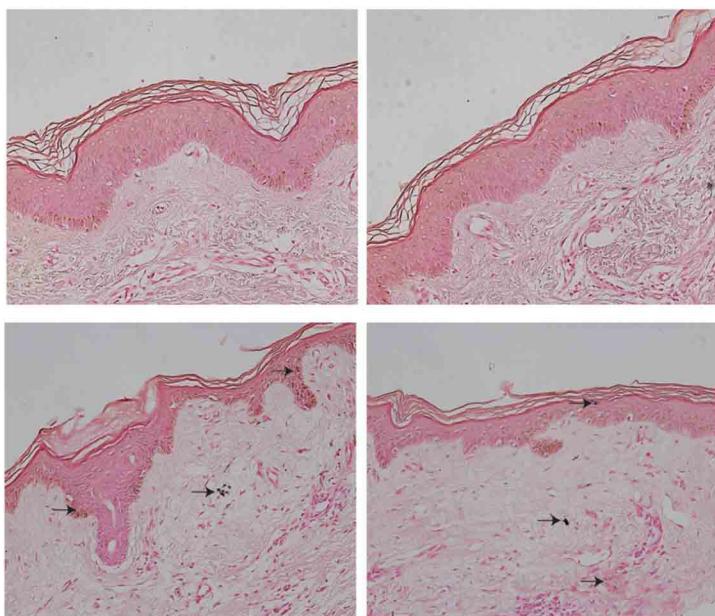
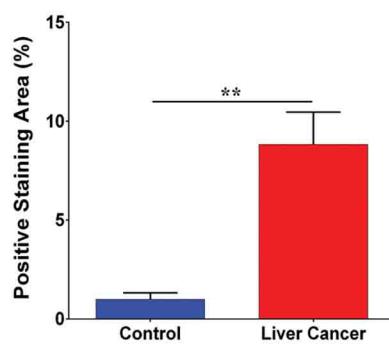
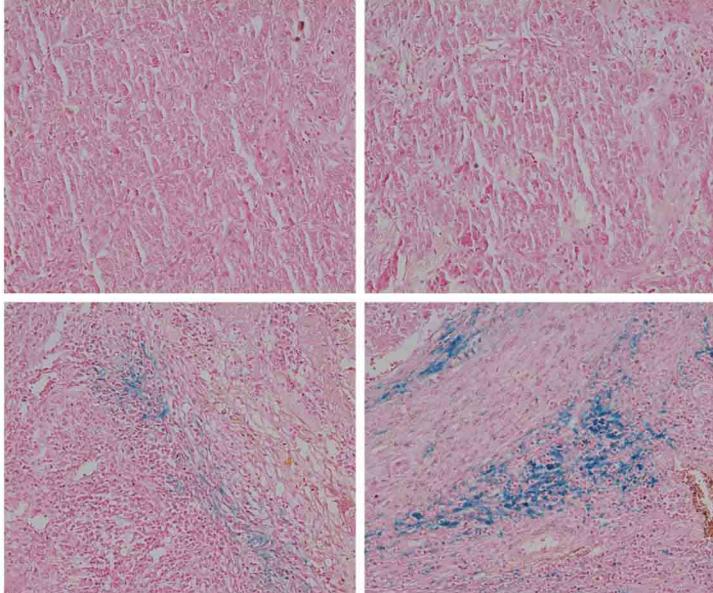


Figure S10

A



B



**Figure S11**

A (normal hepatocytes and metastatic cells ) B (non-metastatic liver cancer cells)

