附錄二

以下為各引子與 DNA 模板 PCR 反應之產物片段大小

(1) Mutation: G382D

DNA template: Plasmid DNA (GI:1458227)

Forward primer: THU-MYH-5/ 5'-CCAACACTGGACAGTGCCACCT-3'

Reverse primer(WT): THU-MYH-6/ 5'-ACAGTCCTGCCAGCAGAC-3'

Reverse primer(MT): THU-MYH-7/ 5'-ACAGTCCTGCCAGCAGA **T**-3'

PCR production size: 204 bp

```
 901 gaacagctct tagcctcagg gagcctgtcg ggcagtcctg acgtggagga gtgtgctccc
 961 aacactggac agtgccacct gtgcctgcct ccctcggagc cctgggacca gaccctggga
1021 gtggtcaact tccccagaaa ggccagccgc aagcccccca gggaggagag ctctgccacc
1081 tgtgttctgg aacagcctgg ggcccttggg gcccaaattc tgctggtgca gaggcccaac
1141 tcagGtctgc tggcaggact gtgggagttc ccgtccgtga cctgggagcc ctcagagcag
```

(2) Mutation: Y165C

DNA template: Plasmid DNA (GI:1458227)

Forward primer: THU-MYH-1/ 5'-CTACTATACCGGATGGATGC-3'

Reverse primer(WT): THU-MYH-2/ 5'-CGCCGGCCACGAGAATAGT-3'

Reverse primer(MT): THU-MYH-3/ 5'-CGCCGGCCACGAGAATAGC-3'

PCR production size: 114 bp

```
361 gtcatgctgc agcagaccca ggttgccact gtgatcaact actataccgg atggatgcag
421 aagtggccta cactgcagga cctggccagt gcttccctgg aggaggtgaa tcaactctgg
481 gctggcctgg gctActattc tcgtggccgg cggctgcagg agggagctcg gaaggtggta
```

(3) Mutation: V232F

DNA template: Plasmid DNA (GI:1458227)

Forward primer: THU-MYH-1/ 5’-CTACTATACCGGATGGATGC-3’

Reverse primer(WT): THU-MYH-12/ 5’-TCAGCACCAATGGCTCGGAC-3’

Reverse primer(MT): THU-MYH-13/ 5’-TCAGCACCAATGGCTCGGA**A**-3’

PCR production size: 315 bp

```
361 gtcatgctgc agcagaccca ggttgccact gtgatcaact actataccgg atggatgcag
421 aagtggccta cactgcagga cctggccagt gcttccctgg aggaggtgaa tcaactctgg
481 gctggcctgg gctactattc tcgtggccgg cggctgcagg agggagctcg gaaggtggta
541 gaggagctag ggggccacat gccacgtaca gcagagaccc tgcagcagct cctgcctggc
601 gtggggcgct acacagctgg ggccattgcc tctatcgcct ttggccaggc aaccggtgtg
661 gtggatggca acgtagcacg ggtgctgtgc cgtGtccgag ccattggtgc tgatcccagc
```

(4) Mutation: R227W

DNA template: Plasmid DNA (GI:1458227)

Forward primer: THU-MYH-1/ 5’-CTACTATACCGGATGGATGC-3’

Reverse primer(WT): THU-MYH-10/5’-CTCGGACACGGCACAGCACCCG-3’

Reverse primer(MT): THU-MYH-11/ 5’-CTCGGACACGGCACAGCACCC**A**-3’

PCR production size: 302 bp

```
361 gtcatgctgc agcagaccca ggttgccact gtgatcaact actataccgg atggatgcag
421 aagtggccta cactgcagga cctggccagt gcttccctgg aggaggtgaa tcaactctgg
481 gctggcctgg gctactattc tcgtggccgg cggctgcagg agggagctcg gaaggtggta
541 gaggagctag ggggccacat gccacgtaca gcagagaccc tgcagcagct cctgcctggc
601 gtggggcgct acacagctgg ggccattgcc tctatcgcct ttggccaggc aaccggtgtg
661 gtggatggca acgtagcaCg ggtgctgtgc cgtgtccgag ccattggtgc tgatcccagc
```

(5) Mutation: G382D

DNA template: Genomic DNA (GI:21902513)

Forward primer: THU-MYH-5/ 5'-CCAACACTGGACAGTGCCACCT-3'

Reverse primer(WT): THU-MYH-6/ 5'-ACAGTCCTGCCAGCAGAC-3'

Reverse primer(MT): THU-MYH-7/5'-ACAGTCCTGCCAGCAGA**T**-3'

PCR production size: 308 bp

```
9301 ctaaagccct cttggcttga gtagggttcg gggatctccg ttcccagctc ccaacactgg
9361 acagtgccac ctgtgcctgc ctccctcgga gccctgggac cagaccctgg gagtggtcaa
9421 cttccccaga aaggccagcc gcaagccccc cagggaggag agctctgcca cctgtgttct
9481 ggaacagcct ggggcccttg gggcccaaat tctgctggtg cagaggccca actcaggtac
9541 ctggatactg ggcgtggagg gcagtggcat gagtaacaag agagaatgga gggaatcggc
9601 agctgaggcc tgacccctgc ctggctgccc tccctctcag Gtctgctggc aggactgtgg
```

(6) Mutation: Y165C

DNA template: Genomic DNA (GI:21902513)

Forward primer: THU-MYH-1/ 5'-CTACTATACCGGATGGATGC-3'

Reverse primer(WT): THU-MYH-2/ 5'-CGCCGGCCACGAGAATAGT-3'

Reverse primer(MT): THU-MYH-3/ 5'-CGCCGGCCACGAGAATAGC-3'

PCR production size: 325 bp

```
8041 gtcatgctgc agcagaccca ggttgccact gtgatcaact actataccgg atggatgcag
8101 gtgactccag gggaggaagg gaagggtcat gggtcagacc ccagatgaga gcctctactt
8161 tggggtgggt gtagagaagg cttcctctac caccttcacc cttgaccttg tctctttctg
8221 cctgcctgtg gctatagaag tggcctacac tgcaggacct ggccagtgct tccctggagg
8281 tgagagccac cctagggtag gggaaatagg aacgatagag ggactgacgg gtgatctctt
8341 tgacctctga tcctacccac aggaggtgaa tcaactctgg gctggcctgg gctActattc
8401 tcgtggccgg cggctgcagg agggagctcg gaaggtaagg ggatggcagg agggtaggaa
```

(7) Mutation: V232F

DNA template: Genomic DNA (GI:21902513)

Forward primer: THU-MYH-1/ 5’-CTACTATACCGGATGGATGC-3’

Reverse primer(WT): THU-MYH-12/ 5’-TCAGCACCAATGGCTCGGAC-3’

Reverse primer(MT): THU-MYH-13/ 5’-TCAGCACCAATGGCTCGGA**A**-3’

PCR production size: 695 bp

8041 **gtcatgctgc agcagaccca ggttgccact gtgatcaact actataccgg atggatgcag**
8101 gtgactccag gggaggaagg gaagggtcat gggtcagacc ccagatgaga gcctctactt
8161 tggggtgggt gtagagaagg cttcctctac caccttcacc cttgaccttg tctctttctg
8221 cctgcctgtg gctatag**aag tggcctacac tgcaggacct ggccagtgct tccctggagg**
8281 **tg**agagccac cctagggtag gggaaatagg aacgatagag ggactgacgg gtgatctctt
8341 tgacctctga tcctacccac aggaggtg**aa tcaactctgg gctggcctgg gctactattc**
8401 **tcgtggccgg cggctgcagg agggagctcg gaag**gtaagg ggatggcagg agggtaggaa
8461 cccaggagtc ttgggtgtct tataatcttg agtcttgcac tccaatcag**g tggtagagga**
8521 **gctaggggc cacatgccac gtacagcaga gaccctgcag cagctcctgc ctggcgtggg**
8581 **gcgctacaca gctggggcca ttgcctctat cgcctttggc cag**gtgatct cacagcccac
8641 ccccactttg tgcgtgccca gcctccttcc tcccagccca ggctaactct ttggcccctc
8701 tgtgccag**gc aaccggtgtg gtggatggca acgtagcacg ggtgctgtgc cgtGtccgag**
8761 **ccattggtgc tgatcccagc agcacccttg tttcccagca gctctg**gtag gatgttgggg

(8) Mutation: G382D (Sequencing)

DNA template: Genomic DNA (GI:21902513)

Forward primer: THU-MYH-5/ 5'-CCAACACTGGACAGTGCCACCT-3'

Reverse primer: THU-MYH-8/ 5'-CCTTGCTGGGCTACTATTCT-3'

PCR production size: 359 bp

```
9301 ctaaagccct cttggcttga gtagggttcg gggatctccg ttcccagctc ccaacactgg
9361 acagtgccac ctgtgcctgc ctccctcgga gccctgggac cagaccctgg gagtggtcaa
9421 cttccccaga aaggccagcc gcaagccccc cagggaggag agctctgcca cctgtgttct
9481 ggaacagcct ggggcccttg gggcccaaat tctgctggtg cagaggccca actcaggtac
9541 ctggatactg ggcgtggagg gcagtggcat gagtaacaag agagaatgga gggaatcggc
9601 agctgaggcc tgacccctgc ctggctgccc tcctctcag Gtctgctggc aggactgtgg
9661 gagttcccgt ccgtgacctg ggagccctca gagcagcttc agcgcaaggc cctgctgcag
```

(9) Mutation: Y165C and V232F (Sequencing)

DNA template: Genomic DNA (GI:21902513)

Forward primer: THU-MYH-53/ 5'-AAGTGGCCTACACTGCAGGA -3'

Reverse primer: THU-MYH-54/ 5'-CGCTGTGGGGTACACACTGT -3'

PCR production size: 742 bp

```
8221 cctgcctgtg gctatagaag tggcctacac tgcaggacct ggccagtgct tccctggagg
8281 tgagagccac cctagggtag gggaaatagg aacgatagag ggactgacgg gtgatctctt
8341 tgacctctga tcctacccac aggaggtgaa tcaactctgg gctggcctgg gctActattc
8401 tcgtggccgg cggctgcagg agggagctcg gaaggtaagg ggatggcagg agggtaggaa
8461 cccaggagtc ttgggtgtct tataatcttg agtcttgcac tccaatcagg tggtagagga
8521 gctagggggc cacatgccac gtacagcaga gaccctgcag cagctcctgc ctggcgtggg
8581 gcgctacaca gctggggcca ttgcctctat cgcctttggc caggtgatct cacagcccac
8641 ccccactttg tgcgtgccca gcctccttcc tcccagccca ggctaactct ttggcccctc
8701 tgtgccaggc aaccggtgtg gtggatggca acgtagcacg ggtgctgtgc cgtGtccgag
8761 ccattggtgc tgatcccagc agcacccttg tttcccagca gctctggtag gatgttgggg
8821 taacaagggt gcttcagggg tgtctgcaaa ggagctctgc ttcacagcag tgttcccttc
8881 ttttaggggt ctagcccagc agctggtgga cccagcccgg ccaggagatt tcaaccaagc
8941 agccatggag ctaggggcca cagtgtgtac cccacagcgc ccactgtgca gccagtgccc
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