

**ASK2J00177R\_PRKN\_R42P\_G02\_AA**  
17,251 bp

5'  
3'

CTTGT TTTGGATGACCTTGAAAGGTTTGC GCGAGTGCTGGCCAGGTGTTTTTTACAACGTC CCTCAATTGCGTTTTGTGCGATGTT  
GAAACAAAACCTACTGGAAC TTTCCAAACGCGTCACGACCGGTCCACAAAAAATGTTGCAGGGGAGTTAACGCAAAAACACGCTACAA

85

PRKN

PRKN-206

TTCGTGAAGATTAGACTGGGCTTATGTGTTTTTTGAGAGAAAGCCCACAGAGATAAATTGCCATTGCATCACACTGTGTCAAGGG  
AAGCACTTCTAATCTGACCCGAATACACAAAAACTCTCTTTCGGGTGTCTCTATTTAACGGGTAACGTAGTGTGACACAGTTCCC

170

PRKN

PRKN-206

TAAACATGATCAAGATGACTTACCACTGTTGATGTTGACCTTGATCACCTGGCTGCGGTAGCGCCTGTCAGGTTTTCTCCACTGTG  
ATTTGTA TAGTTCTACTGAATGGTGACA ACTACA ACTGGA ACTAGTGGACCGACGCCATCGCGGACAGTCCAAAGAGGTGACAC

255

PRKN

PRKN-206

AGGTTGTTTTTTGTTCCCTTTCCATGCTGTATTCTTCAGGAGGAAGACAATCACAGGGGTGTTACAATCATAGGGGCGTTTTACAT  
TCCAACAAAAACAAGGGGAAAGGTACGACATAAGAAGTCTCTCTGTTAGTGTCCCCACAATGTTAGTATCCCCGCAAATGTA

340

PRKN

PRKN-206

TCACAGGGGGATTACAATCACAGGGGCGTTTACATTACAGGGGGATTACAATCACAGGGGCGTTTACATTACAGGGGCGTTTACATA  
AGTGTCCCCCTAATGTTAGTGTCCCCGCAAATGTAAGTGTCCCCCTAATGTTAGTGTCCCCGCAAATGTAAGTGTCCCCGCAAGTAT

425

PRKN

PRKN-206

TTCACAGGGGTGTTACTACTCAAAGGGGCATTTACAGTCATAGGGGCGTTTACATTACAGGGGATTTACTGTACAGGGGCATTA  
AAGTGTCCCCACAATGTGAGTTTCCCCGTAAATGTCAGTATCCCCGCAAATGTAAGTGTCCCCCTAATGACAGTGTCCCCGTAAT

510

PRKN

PRKN-206

TACTTCACCTCCTTGAGCACATCCTTCTTTAGCTGAGCAACTTTGAGTCTGATAACGCACCTTCATCATTACAGGGGTTAGCCAG  
ATGAAGTGGAGGAACTCGTGTAGGAAGGAAATCGACTCGTTGAAACTCAGACTATTGCGTGGAAGTAGTAAGTCCCCAATCGGTC

595

PRKN

PRKN-206

AGACGTGGATAGATAGAAAATTTGGGTTTCTCTTTCTGACTCATTTTCTTCTGTGTCTCTCGGAGGCAGGTGTCCAGTCTTGGT  
TCTGCACCTATCTATCTTTAAACCCAAAGAGAAAGACTGAGTAAAAGAAGACACAGAGGAGCCTCCGTCCACAGGGTTCAGAACCA

680

PRKN

PRKN-206

GTTTTGCTTCTTCAGCCAGAAAACTGTGGCTTTGCAACCAAAGTGCCTGCTGGCCACATGCCATGTGCACGGACTGCACCTGG  
CAAAACGAAGAAGTGGTCTTTTTGACACCGAAACGTTGGTTTTACGGACGACCGGGGTGTACGGTACACGTGCCTGACGTGGACC

765

PRKN

PRKN-206

CTTCAAGCCTAAAGCTGTGAGAATGGGC ACTCCCTTTACGTA ACTGTACTTCTCTGATGTGGACCCCTAACTAGAAAATCTTCA  
GAAGTTCGGATTTGACACTCTTACCCGTGAGGGGAAATGCATTGACATGAAGAGGACTACACCTGGGGGATTGATCTTTAGAAGT

850

PRKN

PRKN-206

TTTTTTTTGTTCACTCTTCTATGGCTTTTCAAGAATCTGCTTTCTTTAGTGAAGTCCCAATTTTATAGTAGTTTTTTTTGCAGGAG  
-----  
AAAAAAAAACAAGTGAGAAGATACCGAAAAGTTCTTAGACGAAAAGAAATCACTTCAGGGTTAAAATATCATCAAAAAAACGTCTCTC

935

PRKN

PRKN-206

GGTTGATCCGATAGCATTTAATAATTCATTATAAAAGGCAAAAATCCTGGCCTCTATGTATAAGTGGGGAGATGAAATGAGGCTT  
-----  
CCAACTAGGCTATCGTAAATTATTAAGTAATATTTCCGTTTTTAGGACCGGAGATACATATTCACCCCTCTACTTTACTCCGAA

1020

PRKN

PRKN-206

CCTGTCACAAAGATCTTCAAAGACAGAAATAAAGAATTATGAAACAAGCTACTAGAGGATGGTATCATACAGCATATACTCAAGT  
-----  
GGACAGTGTTTCTAGAAGTTTCTGTCTTTATTTCTTAATACTTTGTTTCGATGATCTCCTACCATAGTATGTCGTATATGAGTTCA

1105

PRKN

PRKN-206

GCTAAATGAGTATGCAGGTAATAGTTATAAAAAATAAAAAATAATAAAAAATATAAAACATAAAAAATAGCAATTAAAAAATAAAA  
-----  
CGATTTACTCATACGTCCATTATCAATATTTTTATTTTTATTTATTTATTTTTATTTTTGTATTTTTATCGTTAATTTTTATTTT

1190

PRKN

PRKN-206

AACGAGCTATAAAAAATGCTTGTAGCTAGTAATAATGCAGATCCTTATAACAACCCAATGAAGATGAAATTGCACATGCAAGGTCA  
-----  
TTGCTCGATATTTTTACGAACATCGATCATTATTACGTCTAGGAATATTGTTGGGTTACTTCTACTTTAACGTGTACGTTCCAGT

1275

PRKN

PRKN-206

CTTAACATTGAGCTATGAGTCCAAAGATGCAGTTCTAGAGATTTGTGTTCCACCACAAATTATTGGGTAGGGAAATAGATTGCTG  
-----  
GAATTGTAACCTCGATACTCAGGTTTCTACGTCAAGATCTCTAAACACAAGGTGGTGTTAATAACCCATCCCTTTATCTAACGAC

1360

PRKN

PRKN-206

TAGATGAGATTAGGTTAGAAATGAAGGACTACCGTTAACAAAATTTATTGATGGATCAAAGAGGGTAGGAATAAGGCAAAGCACT  
-----  
ATCTACTCTAATCCAATCTTTACTTCTGTATGGCAATTGTTTTAAATAACTACCTAGTTTCTCCCATCCTTATTCCGTTTTCGTGA

1445

PRKN

PRKN-206

AAGACAGGTGTAGGAAGAGAATGTTTTATTTTATTTATCTACTGGACATCCGTGTAGATATCAAATGCTAGTAGATGCAATTATCT  
-----  
TTCTGTCCACATCCTTCTCTTACAAATAAAAAATAATAGATGACCTGTAGGCACATCTATAGTTTACGATCATCTACGTTAATAGA

1530

PRKN

PRKN-206

GAA GTTCCAGTGAGGGCCAGGTGTGGTGGCTCATGCCTGTAATACCAGCACTTAGGGAGGCTGAGGCGAATTGATCACCTGAGGT  
-----  
CTTCAAGGTCACCTCCCGGTCCACACCACCGAGTACGGACATTATGGTCGTGAATCCCTCCGACTCCGCTTAACTAGTGGACTCCA

1615

PRKN

PRKN-206

CAGGAGTTTCGAGACCAGCCTGGCCAACATGAGGAAACCCCTTCTCTACTAAAAATACAAAATTTGCTGGGTGTGGTGGTGGGCAT  
-----  
GTCCTCAAGCTCTGGTCGGACCGGTTGTACTCCTTTGGGGAAGAGATGATTTTTATGTTTTAACGACCCACACCACCCCGTA

1700

PRKN

PRKN-206

CTGTAATCGCAGGTTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGAACCTGCGAGGCGGAGGTTGTCAGTGAGCTGAGATCGTGCC  
GACATTAGCGTCCATGAGCCCTCCGACTCCGTCTCTTAAACGAACTTGGACGCTCCGCCTCCAACGTCACTCGACTCTAGCACGG

1785

PRKN

PRKN-206

ACTGCACTCTATAGTGGGAGACAGAGTGAGATGAGAGAGAGAGAGAGAGAGGAAGGGAGAGAGAGAGAGAGAAAGAAAAGAAAT  
TGACGTGAGATATCACCTCTGTCTCACTCTACTTTTCTTTCTTTA

1870

PRKN

PRKN-206

AAAGGAGGGAGGGAGGAAGGGAAGGAGGGAGGGAGGGAGGAAGAGAAAGAAAGAGAAAGAGAAAGAAAGGTCCAGGGAGATGGCA  
TTTCTCTCCCTCCCTCCTTCCCTTCCCTTCCCTCCTTCTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCCAGGTCCTCTACCGT

1955

PRKN

PRKN-206

AGTCTGGAAATAAGGATTTGGGAGTTGATGACATATCCATTGCATTACAGCCACGGGATTAGAGGAGGTCACCTGGGAGAATACA  
TCAGACCTTTATTCCCTAAACCTCAACTACTGTATAGGTAACGTAATGTCGGTGCCCTAATCTCCTCCAGTGGAACCTCTTATGT

2040

PRKN

PRKN-206

CAGATTCAGACTCCTGGGATGCTCCAAAAATCTGCAGGGCCAATAAAGGGAGAGAATCCAGAAGAGGAAGCTACAAAAGTATGTCC  
GTCTAAGTCTGAGGACCTACGAGGTTTTAGACGTCCCGGTTATTTCCCTCTCTTAGGTTCTTCTCCTTCGATGTTTTCATACAGG

2125

PRKN

PRKN-206

TCTTTTGTAGGGGAAACCAGAAGGGTTTCTCTGGCGGGTGCCAAGAGAAGAAAGGATGATGAGAACAGAAGCCA ACTATATTGAA  
AGAAAAACATCCCTTTGGTCTTCCCAAAGAGACCGCCACGTTCTCTTCTTTCTACTACTCTTGTCTTTCGGTTGATATAACTT

2210

PRKN

PRKN-206

TGTCCTGGAAGGTCAACCTGATAAGAACTGAAATGTGATGACAGGATTGAAGTGTAGAGCTCATTGCTTTACCAAGAGCAGTCT  
ACAGGGACCTTCCAGTTGGACTATTCTTGACTTTACACTACTGTCTTAACCTTACATCTCGAGTAACGAAATGGTTCTCGTCAGA

2295

PRKN

PRKN-206

TCAAGTGTGGCTCACGGAAGAGTATAAAAATAAAGAAATGGAGACCAGGGTGATAAGAAATTCTCAATGAAATTTCTATATAGA  
AGTTCACAACCGAGTGCCTTCTCATATTTTATTTCTTTACTTCTGGTCCCACTATTCTTTAAGAGTTACTTTTTAAGATATATCT

2380

PRKN

PRKN-206

AAAATGGGGTAGTAATCGCAGGAGGGTGTGAGGACAGGTTGGTTGGTTTGCTAAAGTTAGGGAATACTAGATTTAGTGATAGTTC  
TTTTACCCCATCATTAGCGTCCCTCCCACACTCCTGTCCAACCAACCAACGATTTCAATCCCTTATGATCTAAATCACTATCAAG

2465

PRKN

PRKN-206

TCAAAGGTGCAGAAGAACTTCCCAGGCAAGGGACATTTGGAACATGTGGAGTTACTTTTTGTGTTGCCGCAATTAACCGGGGCG  
AGTTTCCACGTCTTCTTTGAAGGGTCCGTTCCTGTAAACCTTTGTACACCTCAATGAAAACACAACGGCGTTAATTGGCCCCGC

2550

PRKN

PRKN-206

TGCCTCTGATACTTACTGGGCTGCAGGTGGAGCCGAACATCCCACGGAGCTTAGGAAACCCTCTCATGAGGAAGAATTGCCTGCC  
ACGGAGACTATGAATGACCCGACGTCCACCTCGGCTTGTAGGGTGCCTCGAATCCTTTGGGAGAGTACTCCTTCTTAACGGACGG

2635

PRKN

PRKN-206

TTCAGTGCAGTCCATTTTTGTGCTCATGTTAATGGTCTATCTTGGGCTGTGATTTTTCTTTGGGTCTCTCAGCAAACTGTC  
AAGTCACGTGACTCAGGTAAAAACACGAGTACAATTACCAGATAGAACCAGACTAAAAGAAACCAGAGAGTCTGTTTTGACAG

2720

PRKN

PRKN-206

TGAGGCATCACATGATGTTATTTGCCATCTAAAAGGACTTCACCGAACCTTTGACAGTTCTGGATATGACTTTGATTAGTCCACC  
ACTCCGTAGTGTACTACAATAAACGGTAGATTTTCTGAAGTGGCTTGGAACTGTCAAGACCTATACTGAAACTAATCAGGTGG

2805

PRKN

PRKN-206

TTATGTACCTGTATTCTGCAGAATCAATCACTGGAACAAGGGGAGTGCCAGGCACAGATTGGCTTGCATCATCCCTGAACCAAT  
AATACAGTGGACATAAGACGTCTTAGTTAGTGACCTTGTTCCTCAGGGTCCGTGTCTAACCGAACGTAGTAGGGACTTGGTTA

2890

PRKN

PRKN-206

CATTTGACCAATGACAAGGAGGATGGGGCTGTGCTGATGAATGACATTGCTCTTCTCAGTGCAGGAGGCGGAATGGCTGCTTGAG  
GTAAACTGGTTACTGTTCTCCTACCCCGACACGACTACTTACTGTAACGAGAAGAGTACAGTCTCCGCTTACCGACGAACTC

2975

PRKN

PRKN-206

GAGCAGCCAGAATCATTTAAGAATCATTAAATTATTGATATTGACTACTATATTTATGAAGTTTATACCCTGGTCAGACTTGGTAA  
CTCGTCGGTCTTAGTAAATTCTTAGTAATTAATAACTATAACTGATGATATAAATACTTCAAATATGGGACCAGTCTGAACCATT

3060

PRKN

PRKN-206

ATAAAATTGCTTTAAAAGAAATATAAGGGCCCATCCACCAATAACCCTTTCCCTCTTCCCACCCATTCACTTCCTTACTCTCTG  
TATTTAACAGAATTTCTTTATATTCCCGGGTAGGTGGTTATTGGGAAAGGGGAGAAGGGTGGGTAAGTGAAGGAATGAGAGAC

3145

PRKN

PRKN-206

GGACTTCTCAACCCTGGTTAGGGATATCATAAAAAAGGAATCTGGATATATCTCATTATGTTTTTTGTTATCAGTGCATTATGAT  
CCTGAAGAGTTGGGACCAATCCCTATAGTATTTTTTCTTAGACCTATATAGAGTAATACAAAAACAATAGTCACGTAATACTA

3230

PRKN

PRKN-206

GTTGATTGATAATACACATGATTGATAATGTTTACTGGTATGTTGTTTCTGATACTATATTATACGTCATCAAAAACAATTA  
CAACTAACTATTATGTGTAATAACTATTACAAATGACCATACAACAAACAAAGACTATGATATAATATGCAGTAGTTTTGTTAAT

3315

PRKN

PRKN-206

TTAAAACAATGCATTTCCAAGCTTTTCATATGTAATTAACCTTAGAAAGTAGAGGTGAGCCATATTCTCTATCATATCTCTTGG  
AATTTTGTACGTAAAGGTTTCGAAAAGTATACATTAATTTGGAATCTTTCATCTCCACTCGGTATAAGAGATAGTATAGAGAACC

3400

PRKN

PRKN-206

TCTCTGGAAGTTTTCTGTCCACCAAGAGGAGCAGAATCCAGAAAAATTGGCTACTTTATTTAGTATTTACCCACATCCTATCTAA  
AGAGACCTTCAAAAAGACAGGTGGTTCTCCTCGTCTTAGGTCTTTTTAACCAGATGAAATAAATCATAAATGGGTGTAGGATAGATT

3485

PRKN

PRKN-206

TCTCCCTTAGTTACCATGCAAGCAAAGGACACTGCTTTTCATTAGCTCTACCTCCTCTAGGTGCCTAGAATAGGGAACTATTTTTG  
AGAGGGGAATCAATGGTACGTTTCGTTTCTGTGACGAAAAGTAATCGAGATGGAGGAGATCCACGGATCTTATCCCTTGATAAAAAAC

3570

PRKN

PRKN-206

GAGCACACACTTGCCAGCACTAGGAGGATAGGCCCTGTACTAGTCTCTTTCTGAGATTTTCTAATACATCCATAATCTCAATAA  
CTCGTGTGTGAACGGGTCGTGATCCTCCTATCCGGGACATGATCAGAGAAAGACTCTAAAAGATTATGTAGGTATTAGAGTTATT

3655

PRKN

PRKN-206

ATCTTGTGTAACAGACATTGGTGTTCATCCCTTATACCGATTTATTAGATCAGGAAGCTAACAGTCAAGGTGGCCAGGTAACCTT  
TAGAACACATTGTCTGTAACCACAACGTAGGGAATATGGCTAAATAATCTAGTCTTCGATTGTCAGTTCACCGGTCCATTGAA

3740

PRKN

PRKN-206

GTCATAAAATTAGCAAGCGTTACAACCAGCATTCAAATTTCTCTTTATGTAGCTCTAAAAGACGTTCTGCCTTCTGTGACTTTAAA  
CAGTATTTTAAATCGTTCGCAATGTTGGTCTGTAAGTTTAAAGAGAAATACATCGAGATTTCTGCAAGACGGAAGACACTGAAATTT

3825

PRKN

PRKN-206

GAGGTAGTAGGTGGGGAGAACTGGGTACTTCCCTTCCACTCCTGTTTTGGAAATCATGGCTGGAGTTCAGGGGCTGGTACAGATGG  
CTCCATCATCCACCCCTCTTGACCCATGAAGGAAGGTGAGGACAAAACCTTTAGTACCGACCTCAAGTCCCCGACCATGTCTACC

3910

PRKN

PRKN-206

GACATGACATGTTTCCCACATATGTCAGAAAAAGGTTGAGACCCACTCAAATCACATTACTGCCATTCAGCACTAGCCATTTTTTC  
CTGTACTGTACAAAAGGGTGTATACAGTCTTTTTCCAACCTGGGTGAGTTTAGTGTAATGACGGTAAGTCGTGATCGGTA AAAAG

3995

PRKN

PRKN-206

ACATAATGGCACTTGATTATGAACTCAGTGAGTTTTCTTAAGATGTTTTTTCTTATTCATGCGAATGTTTTAGTTGGTCAAATATT  
TGTATTACCGTGAAC TAATACTTGAGTCACTCAAAGAATTCTACAAAAAAGAATAAGTACGCTTACAAAATCAACCAGTTTATAA

4080

PRKN

PRKN-206

ATGTATTTGGTTTATCTTTCCATTTTAAATTTATATTGTATGTTAGATTTACTGTTAAAAATATTCATATCCGTAGTATTTATGA  
TACATAAAACCAAATAGAAAAGGTA AAAATTTAAATATAACATACAATCTAAATGACAATTTTTATAAGTATAGGCATCATAAACT

4165

PRKN

PRKN-206

TTTATCTAAATACTGTAAC TTTAAATCTGTAAC TTTTCTATTATAGAAAAA ACTTGTATATACTTAGGATTT CAGTAGTTGGACA  
AAATAGATTTATGACATTGAAATTTAGACATTGAAAAGATAATATCTTTTTTGAACATATATGAATCCTAAAAGTCATCAACCTGT

4250

PRKN

PRKN-206

GAGGTATCTTTAATATTTTTTGCAGTTTCCCTTTACAAAAAACTCTCATCCTTGCAGTAGGAGTTCCATGATTTGAACCCCTGG  
CTCCATAGAAATTATAAAAAACGTCAAAGGGAAATGTTTTTTTGGAGTAGGAACGTCATCCTCAAGGTAATAAATTGGGGACC

4335

PRKN

PRKN-206

AGCAAAATCATAAACTTAGGATCTCCTGGAATTTTTATCTGGTTTTATAGCAGCTTTGGCACAAATTCAGCCACTTCTTCCCAC  
TCGTTTTAGTATTTGAATCCTAGAGGACCTTAAAAATAGACCAAATATCGTCGAAACCGTGTTTAAGGTTCGGTGAAGAAGGGTG

4420

PRKN

PRKN-206

ATTCCTTCCTATGGTGTCTTTACTTTAAATCTATTCTCACTAGTAGAAAAATGAAATTTAGAACTGGGGTCATATCTTTTGTCCCTA  
TAAGGAAGGATACCACAAAATGAAATTTAGATAAGAGTGATCATCTTTTACTTTAAATCTTGACCCCAAGTATAGAAAACAGGGAT

4505

PRKN

PRKN-206

TAGCCCCTAACTTGTGCATGTGTCTTTTTCTGATGAATTGGTTGTCTTATGGTCTCTGATCTGAGGATGCTGTGAAGATACCTCAGG  
ATCGGGGATTGAACAGTACACAGAAAAGACTACTTAACCAACAGAATACCAGAGACTAGACTCCTACGACACTTCTATGGAGTCC

4590

PRKN

PRKN-206

GCTTCCAATACATTTTTATTTCTTCCCCTCTATTTTCAAAGGCGTCAAATGAAATTGACTTAAAAGTGTATCAAAAAGCACCTTTT  
CGAAGGTTATGTAAAAATAAAGAAGGGGAGATAAAAAGTTCCGCAGTTTACTTTAACTGAATTTTACATAGTTTTTCGTGGAAAA

4675

PRKN

PRKN-206

CCTCCGTAATTAGTATTTTTTATGAATTTTCTTTATTTGGAGCACTTTGTCACTGGTCGTCCTTCTTTTTCTAAACACTTTCCG  
GGAGGCATTAATCATAAAAAAGTACTTAAAAGAAATAAACCTCGTGAAACAGTGACCAGCAGGAAGGAAAAAGATTTGTGAAAGGC

4760

PRKN

PRKN-206

TGCTGGTCAGAGATGTCAGGCCTTTGTTCTTGTGGTGCCATCTGGACCACCTGCCCTCACTGGAGTGTCACGTCTGTTTTGGGGC  
ACGACCAGTCTCTACAGTCCGGAACAAGAACCACGGTAGACCTGGTGGACGGGAGTGACCTCACAGTGCAGACAAAACCCCG

4845

PRKN

PRKN-206

CCATGTTGTTTCATGGTTATTGTTTCACGGTCCCTTTGCTCTTAGCTCCTCACTGGAGCTTTTATTTATTTGTAAGTGCACACCCATAT  
GGTACAACAAGTACCAATAACAAGTGCCAGGAAACGAGAATCGAGGAGTGACCTCGAAAATAAATAAACATGACGTGTGGGTATA

4930

PRKN

PRKN-206

AGGGAATATCTGATTTATGTCATAAAGCCTTTTTATTGTTATCTTTTAAATCATGAGGGATAGAAATGTGGACTTTTTTTTTTTT  
TCCCTTATAGACTAAATACAGTATTTTCGGAAAAATAACAATAGAAAAATTAGTACTCCCTATCTTTACACCTGAAAAAAAAAAAA

5015

PRKN

PRKN-206

TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGACAAGGTCTCTGTCAACCCAGGGTGACTGAGTGCAATGGCACAAACCATAGCTCACTGA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAATCTGTTCCAGAGACAGTGGGTCCCACTGACTCACGTTACCGTGTGGTATCGAGTGACT

5100

PRKN

PRKN-206

AACCTCTAATTCCTGGGCTTACACAGTCATCCCACCTCAGCCTCCAGAGTAGCTGGGACTGCAAGTGCACGCCACCACGCCCTGC  
TTGGAGATTAAGGACCCGAATGTGTTCAGTAGGGTGGAGTTCGAGGTTCTCATCGACCTGACGTTACAGTGCAGTGGTGCAGGACG

5185

PRKN

PRKN-206

TGATTGTTTTAAAAAATTTTTGTAGAGATGGGGTCTCACTTTGTTGCCAGGCTGGTCTTGAACCTTCTGGGCTCAAGTCATCCT  
ACTAACAAAATTTTTTAAAAAACATCTCTACCCAGAGTGAAACAACGGGTCCGACCAGAACTTGAAGACCCGAGTTCAGTAGGA

5270

PRKN

PRKN-206

TGCCCTTGGCCTCCCAAAGTGTAGGATTACAGGCTTGAGCCATTGTGCCTGGCCTGGACTTTTTCTTCTGAGATGGTTTCAGGA  
ACGGGAACCGGAGGGTTTACAATCCTAATGTCCGAACCTCGGTAACACGGACCGGACCTGAAAAGAAGACTCTACCAAAGTCTCT

5355

PRKN

PRKN-206

AGCCTATTTTAGTAGAAATGGAATGAGCTTTAGAGTTAGATTGAAATAAATTTGAAACCCAGTTCATTAGAAAAGTAATTAATGT  
TCGGATAAAATCATCTTTACCTTACTCGAAATCTCAATCTAACTTTATTTAAACTTTGGGTCAAGGTAATCTTTTCATTAATTACA

5440

PRKN

PRKN-206

CCTTAGAAAAGTGGGTCCCATTCCTGTGCCTTCGTTTATTATTCTGTAAAATAAGGATAATAATAGGGACCTGACCAGATCACT  
GGAATCTTTTCACCCAGGGTAAGGGACACGGAAGCAAATAATAAGACATTTTATTCTATTATTATCCCTGGACTGGTCTAGTGA

5525

PRKN

PRKN-206

GGGAGGCTTAGAAAAACCATATGAGAGCACAATGTCTGGCACATAGTAAGTGCCTGATTATTATTGGCATTGTAATGATTATTAT  
CCCTCCGAATCTTTTTGGTATACTCTCGTGTACAGACCGTGTATCATTACGGACTAATAATAACCGTAACATTACTAATAATA

5610

PRKN

PRKN-206

AATTATGATGAGGTGGGTCATCTCACATTGGTATTGAGAAATAATTAGCTATAGTACTACATTTAAAGGAAACACAGCAGTAAAT  
TTAATACTACTCCACCCAGTAGAGTGAACCATAACTCTTTATTAATCGATATCATGATGTAATTTTCCTTTGTGTCGTCAATTA

5695

PRKN

PRKN-206

AAACAATAACACTTGGCCTTGAGGAGTTTGTATTCTTTTTAAAGAAGGCAAAATGTATATCAAAAACAGCTAAATGTCCATTATTT  
TTTGTATTGTGAACGGGAACCTCTCAAACAATAGAAAATTTCTTCCGTTTTACATATAGTTTTTGTGCGATTTACAGGTAATAAAA

5780

PRKN

PRKN-206

TTAAATGTTACAAGACGATAGTTTTAAATACTATAAATATTATTTAATGAACCGAATAATATGGTCTGTGGTTTTATTTATGTTTT  
AATTTACAATGTTCTGCTATCAAAAATTTATGATATTTATAATAAATTAATTTGGCTTATTATACCAGACACCAAATAAATACAAAA

5865

PRKN

PRKN-206

CAAGATAAGGGAACCTGAGACCTAAAGAGGGAGGTTAATAGATTGACCCCTAGCATCCTAAGCCAATTAAGGAGTCTGTGGGGAT  
GTTCTATTCCTTGACTCTGGATTTCTCCCTCCAATTATCTAACTGGGGATCGTAGGATTCGGTTAATTTCTCAGACACCCCTA

5950

PRKN

PRKN-206



TTTTTCATAGGTCTTCCTAATGCTTCAGGATGTTCTTTTAACCCGTGTGCTATCCTGCTTCCATGAGGAATGTGGTGAATATTTAA  
AAAAGTATCCAGAAGGATTACGAAGTCCTACAAGAAAATTGGGCACACGATAGGACGAAGGTA CTCTTACACCACCTTATAATTT

6035

PRKN

PRKN-206

AGACATATATAGTAAATGCCACTGGTGCCCTGAATAAGGAAGATCAGGCTTTTTGCAGTAGCTGATAGCCAGAAGCTTCTTGGGGG  
TCTGTATATATCATTTACGGTGACCACGGGACTTATTCCTTCTAGTCCGAAAACGTCATCGACTATCGGTCTTCGAAGAACCC

6120

PRKN

PRKN-206

AGGTCACATTTGAAGTGGGCCATGGAGGTAGGCAGGATTTCAATAGGAAGAGGAGAAGGAGGGAGGTCATGAATAAAAGCAAGAA  
TCCAGTGTAACCTTCACCCGGTACCTCCATCCGTCTAAAGTTATCCTTCTCCTCTTCTCCTCCCTCCAGTACTTATTTTCGTTCTT

6205

PRKN

PRKN-206

GTTGTGTGCAGCAGTTTTTTGTGATTTTTTTTTTCTGGGAGCATTTAGTTTTAAAAGAGTACACATGGAGATTAATGAAGAAAAT  
CAACACACGTCGTCAAAAAACACTAAAAAAAAAAGACCCTCGTAAATCAAATTTTCTCATGTGTACCTCTAATTACTTCTTTTA

6290

PRKN

PRKN-206

GCTGGAATGTAGGTTTGTGCTAGATGAAAGGGATCTTGGAGTCTTTCCTCACCAGCCGACAGTGTGAGACTTAAAGGATTTGAGT  
CGACCTTACATCCAAACACGATCTACTTTCCCTAGAACCTCAGAAAGGAGTGGTCGGCTGTGCACACTCTGAATTTCTAAACTCA

6375

PRKN

PRKN-206

GGTGTGACATAGCTCTGTATTAATAAGGCTCATTTTTGCAGAACTATGTAGGGCCTTTTTGGAGGTGATGGCGTGGATCAAGACTCC  
CCACACTGTATCGAGACATAATTATTCCGAGTAAAACGTCTTGATACATCCCGAAAAACCTCCACTACCGCACCTAGTTCTGAGG

6460

PRKN

PRKN-206

AGTTGGGGGCTATTATGAGACTCTAGAAAAGATGTGATGAGAGCGTGACTTCAAGCAGTGAGAGAAAAGAATGGAAAGTAAAGGGC  
TCAACCCCGATAAATACTCTGAGATCTTTTCTACACTACTCTCGCACTGAAGTTCGTCACTCTCTTTCTTACCTTTTCAATTTCCCG

6545

PRKN

PRKN-206

AGTGAGAGACGCTGAAGAGGTGGGACAGCAGGTGCAGTGAGAAGACGGCATGCAGACAGACAGACTAGAGGATGCAGCCTGGGTC  
TCACTCTCTGCGACTTCTCCACCCTGTCTGTCACGTCACCTTCTGCCGTACGTCTGTCTGTCTGATCTCTTACGTCGGACCCAG

6630

PRKN

PRKN-206

TCACGGGGAACAGTGGCTTCAATAAGACAAATGGTGTCACTAGTGTCTCCACCCCTCCCTGCCAAAAAGAGGGCAAATAATTGT  
AGTGCCCTTGTCAACCGAAGTTATTCTGTTTTACCACAGTGATCACAGAGGTGGGGGAGGGACGGTTTTTTCTCCCGTTTTATTAACA

6715

PRKN

PRKN-206

CTTCATAGACCCAGTGGAGCATTTTTGGCCAGGACCACCCAAGTCTAGGGCTCTGAGCCATAGCCCCGAGTGGGTCTTCACTCTGG  
GAAGTATCTGGGTCACTCGTAAAACCGGTCTGGTGGGTTTCCAGATCCCGAGACTCGGTATCGGGGCTCACCCAGAAGTGAGACC

6800

PRKN

PRKN-206

PCR Forward

TTTATTAAGAGGGTCACTGT

TCTATAGAGCAGCTTAGATTTTTTCCATTGCTATACCTTGAGTGCTAACACATCGCCTCCTATTTTTATTAAGAGGGTCACTGT  
AGATATCTCTGCTCGAATCTAAAAAAGGTAACGATATGGAACCTCACGATTGTGTAGCGGAGGATAAAAAATAATTCTCCAGTGACA

6885

PRKN

PRKN-206

PCR Forward

GGAGG

GGAGGGAGTGTGAGTGTGTACATGCTGTCAGAGCTGAGTCTTTTCAATAAACTCATGGGACTCTTTCAATTCCAATCAAGCAAGT  
CCTCCCTCACACTCACACATGTACGACAGTCTCGACTCAGAAAAGTTATTTGAGTACCCTGAGAAAAGTTAAGGTTAGTTCGTTCA

6970

PRKN

PRKN-206

GTCCTGCTCAAGTCTCTCTGTTTTCCAGGATGGATGTCAAAGGGAGAATGCAATTTTGGTTTGCAGGGTCACTGACGAATATATGA  
CAGGACGAGTTCAGAGAGACAAAAGGTCCTACCTACAGTTTCCCTCTTACGTTAAAACCAAACGTCCAGTGACTGCTTATATACT

7055

PRKN

PRKN-206

AAGGGAAATCTCGTGGGTAACCTAACTCTGTTTTCCCAAATATTGCTCTATAGCATTAAAGTTTTTTGTTGTAAGTGAAAGAAAAT  
TTCCCTTTAGACACCCATTGATTGAGACAAAAGGGTTTATAACGAGATATCGTAATTCAAAAACAACATTCACCTTCTTTTA

7140

PRKN

PRKN-206

ATATAACCTTCACTGAAGGGCTGCGAGGGGTAAATCGGTTGAGAAATGTTGCTATCACCATTTAAGGGCTTCGAGTGATGCTCAC  
TATATGGTAAGTGACTTCCCGACGCTCCCATTTAGCCAACCTCTTTACAACGATAGTGGTAAATTCCCGAAGCTCACTACGAGTG

7225

PRKN

PRKN-206

Donor Template SNV -> REV

GAC

TTTCTTTCTCCCTTCCAATTTCTTTGGTCAAGTGTGTTGTCAGGTTCAACTCCAGCCATGGTTTTCCAGTGGAGGTCGATTCTGAC  
AAAGAGAAGAGGGAAGGTTAAAGGAACAGTCACAAACAGTCCAAGTTGAGGTCGGTACCAAAGGGTCACCTCCAGCTAAGACTG

7310

PRKN

PRKN-206

F V R F N S S H G F P V E V D S D  
ENSE00003536181  
PRKN-206

Donor Sequence SNV -> REV

Donor Template SNV -> REV

ACCAGCATCTTCCAGCTCAAGGAGGTGGTTGCTAAGCGACAGGGGGTTCCGGCTGACCAGTTGCGTGTGATTTTCGCAGGGAAGG  
 ACCAGCATCTTCCAGCTCAAGGAGGTGGTTGCTAAGCGACAGGGGGTTCCGGCTGACCAGTTGCGTGTGATTTTCGCAGGGAAGG  
 TGGTCGTAGAAAGGTCGAGTTTCTCCACCAACGATTCGCTGTCCCCAAGGCCGACTGGTCAACGCACACTAAAAGCGTCCCTTCC

PRKN

PRKN-206

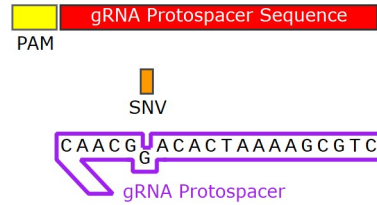
T S I F Q L K E V V A K R Q G V P A D Q L R V I F A G K

ENSE00003536181

PRKN-206

Donor Sequence SNV -> REV

7395



Donor Template SNV -> REV

AGCTGAGGAATG

AGCTGAGGAATGACTGGACTGTGACAGGTGAGTCTCCCTTGGCGGCCGTTCTTGGGATGCCGCCAGCTCCATTGCTCATGCCGCCT  
 TCGACTCCTTACTGACCTGACACGTCCACTCAGAGGGAACCGCCGGCAAGAACCCTACGGCGGTTCGAGGTAACGAGTACGGCGGA

PRKN

PRKN-206

E L R N D W T V Q V S L P W R P F L G C R Q L H C S C R L

ENSE00003536181

PRKN-206

Donor Sequence SNV -> REV

7480

Donor Sequence SNV -> REV

GCGCTGCCAATCTGACATTCATGCCTGAGATCTAATAGAATAAATAGTGCCTGGGGATTCCCTTGAACCTTTACTCCACACTGCTTC  
 CGCGACGGTTAGACTGTAAGTACGGACTCTAGATTATCTTATTTATCACGGACCCCTAAGGAACCTTGAAATGAGGTGTGACGAAG

PRKN

PRKN-206

R C Q S D I H A

(In frame with PRKN-206)

7565

ATTAATTCTGACCTTCTTAATTATGCATTAAACAGCAAGCAAGAAAGATTGGAAGAACAACCTGCGAGTGAGAAAAGAGAGAGAGA  
 TAATTAAGACTGGAAGAATTAATACGTAATTTTGTGCTTCGTCCTTTCTAACCTTCTTGTGACGCTCACTCTTCTCTCTCTCT

PRKN

PRKN-206

CGTAATTTTGTCTCGTTCGTCC

Sanger Sequencing Primer

7650

AAGAACACACGAGCTAGGCTTAGTGAATAAATGTCTACTGACTACAGGAGCAGCAAGGCACAATTTCTGTGTCTGTTCAATTTCT  
 TTCTTGTGTGCTCGATCCGAATCACTTATTTACAGATGACTGATGTCTCGTTCGTTCCGTTAAAGACACAGACAAGTTAAAGA

PRKN

PRKN-206

7735

ACCTTACTTATTCCATTTGAATCTTAACGAAGAAGGATTCGAATAAATTGTTCCCAATCAGGCTGCTCAGTCCCTGCACTGTGAG  
TGGAAATGAATAAGGTAAACTTAGAATTGCTTCTTCTTAAGCTTATTTAACAAGGGTTAGTCCGACGAGTCAGGGACGTGACACTC

7820

PRKN

PRKN-206

C  
PCR Reverse

GAATTTGTAACCCAATTGTGACCCCTGGAGGTTAGTGAGGGCTGCTGCTATGCTGCGCTAGAGGAGGTGTGGGCTCCGGGGCCCA  
CTTAAACATTGGGTTAACTGAGGGACCTCCAATCACTCCCAGACGACGATACGACGCGATCTCCTCCACACCCGAGGCCCCGGGT

7905

PRKN

PRKN-206

CTTAAACATTGGGTTAACTGAG

PCR Reverse

TTGGCAACTAGCTTTGGGCACTCCTTGGCCAGGACCAGAATCGCACAGTTCTGCGAGTGTGGGGAAGGAAGCCTGGAGCACAAAC  
AACCGTTGATCGAAACCCGTGAGGAACCGGTCCTGGTCTTAGCGTGTCAAGACGTCGACTACCCCTTCTTCGGACCTCGTGTTG

7990

PRKN

PRKN-206

AACAGTATACCTTTGCATGAATTTCTCCAAGGTTCAAGTAACATTGTCCCTGGAAATAGGCCCTGCAACGTAATAAGTGTGAACG  
TTGTCATATGGAAACGTACTTAAAGAGGTTCCAAGTCATTGTAACAGGGACCTTTATCCGGGGACGTTGCATTATTACACTTGC

8075

PRKN

PRKN-206

ATGCTCTCTTCTCCTGCCCCAGCAGAGCTTCTGGCAGCCCACTGCTCCTAGCCCCATGAAAGCCCTACACACATGTCATTCTG  
TACGAGAGAAGAGAGGACCAGGGGTCGTCTCGAAGACCGTCGGGTGACGAGGATCGGGGTACTTTGCGGATGTGTGTACAGTAAGC

8160

PRKN

PRKN-206

GATTGGTGATTTTTGTAGGAATTAGGGGGACTGGTGAGGTGACTGATAATACCACCATCACCTAGAAGTACAGACCCGTCCTTTG  
CTAACCACTAAAAACATCCTTAATCCCCCTGACCACTCCACTGACTATTATGGTGGTAGTGGATCTTGATCTCTGGGCAGGAAAC

8245

PRKN

PRKN-206

TTGGGGAAACTCGCAAATACAACCTCAACATTTGTTGACGCTATTCTTTGTGAATGCAAGAAAGACGAAACGCTTTCTGGGAATGG  
AACCCCTTTGAGCGTTTATGTTGAGTTGTAAACAACCTGCGATAAGAAACACTTACGTTCTTTCTGCTTTGCGAAAGACCCCTTACC

8330

PRKN

PRKN-206

TCCCTGTGACTGTGAAGGACCCTGCAGATGTATGTTCCCTTTTCTTAACCAGCATCAATTAATTGCACTCAGGTTTACAGCTGT  
AGGGACACTGACACTTCTGGGACGTCTACATACAAGGGGAAAAGAATTGGTCGTAGTTAATTAACGTGAGTCCAATGTGACACA

8415

PRKN

PRKN-206

GTGGGTATCACTGCTCCGCGCAGGGGGGCTCCTGGGTCAGAGTACACAAAGTCCGTCCTTGTATCTGCATCCTTTCCCTGTCTCT  
CACCCATAGTGACGAGGCGCGTCCCCCGAGGACCCAGTCTCATGTGTTTCAGGCAGGAACATAGACGTAGGAAAGGGACAGAGA

8500

PRKN

PRKN-206

TGTGGGTAACGATATTTATGGCTTTGTAAAATGCTCTCAGAATTTGGGTATACAAAGAAGCTACAGAAATGCAAATTGTTCTCTGT  
ACACCCATTGCTATAAATACCGAAACATTTTACGAGAGTCTTAAACCCATATGTTTCTTCGATGTCTTTACGTTTAAACAAGGACA

8585

PRKN

PRKN-206

CATTCTGCATTGCATCTCCTGCTGATGGTGTGAGGCACATACTCGTTGTGCACAAACTGCTGGCCTCTGCTTTCAGGCAATTTG  
GTAAGACGTAACGTAGAGGACGACTACCACAACCTCCGTGTATGAGCAACACGTGTTTGTACGACCGGAGACGAAAAGTCCGTTAAAC

8670

PRKN

PRKN-206

GTTTTATAAGGGAAGTGCATGTGCTAAAAAGGGTTTTGATTTTTTTTTTTCTATTTTCAGTCAACTAAAAAGATTTTCACTGTAT  
CAAAATATTCCTTCACGTACACGATTTTTCCCAAAACTAAAAAAGATAAAGTCAGTTGATTTTTCTAAAAGTGACATA

8755

PRKN

PRKN-206

CTGCCAACCTCTAAATCCAAGGATGTTTCCTTCACAAATAAATAATTTTAAACAGCTCCTTGAATCAAAACATTTTATATTGCC  
GACGGTTGGAGATTTAGGTTCTACAAAGGAAGTGTATTTATTAAATTTTGTGCGAGGAACCTAGTTTTGTAAAATATAACGG

8840

PRKN

PRKN-206

AAAACCTTCAGGTTCTAAACTGCCATTTGTGCTGATTCATAAAACAATTAGCGATTTTCATATGTAGTTAGACTAATTGCTTCAGA  
TTTTGGAAGTCCAAGATTTGACGGTAAACACGACTAAGTATTTTGTAAATCGCTAAAGTATACATCAATCTGATTAACGAAGTCT

8925

PRKN

PRKN-206

TGATTGACTTTGCAACATATATGCCTAAGACATGTGTTGATTTATGAGTCTATTTTGACAAACACTTCTTAAGCACTTCCAATG  
ACTAACTGAAACGTTTGTATATACGGATTCTGTACACAACCTAAATACTCAGATAAAACTGTTTGTGAAGAATTCGTGAAGGTTAC

9010

PRKN

PRKN-206

TCCTAGGCTTCTCAGGGGATCCAAAAGAGAGACCTAACTCAGCCCCTGTTTTTCATGGAGACTGCTCTTTATTTATGAGCCCTAAA  
AGGATCCGAAGAGTCCCCTAGGTTTTCTCTCTGGATTGAGTCGGGGACAAAAGTACCTCTGACGAGAAATAAATACTCGGGATTT

9095

PRKN

PRKN-206

ACCGAGAGAAAATATTAGATTGAACCATATGGGATTGCCATTTTTACAGGTTCAACAATTTTCATGTTGTTCAACCTAATAGCTATA  
TGGCTCTCTTTATAATCTAACTTGGTATACCCCTAACGGTAAAAATGTCCAAGTTGTTAAAGTACAACAAGTTGGATTATCGATAT

9180

PRKN

PRKN-206

ATATAAGAATATGAAACATAACTGCCGTATCGCACCTGAAAATATTATGAAGTTTTAAAGGTGGAGAAAACACATCTGGTTGGAA  
TATATTCTTATACTTTGTATTGACGGCATAGCGTGGACTTTTATAACTTCAAAAATTTCCACCTCTTTTGTGTAGACCAACCTT

9265

PRKN

PRKN-206

GTCACCAGGAAGAACTTCTTGATGAATTGAGTTGAGGTAGGATTCTGTAGATGGAGGAATAGGGGAATGAGCATAGAGAATGCT  
CAGTGGTCTTCTTGAAGAACCTACTTAACTCAACTCCATCCTAAGACATCTACCTCCTTATCCCCTTACTCGTATCTCTTACGA

9350

PRKN

PRKN-206

TGCCAAAAAGGATGGGTTCTTGTCTTCTAGAACCTGAAGAGAGATGTTGAAGATTGGACAAAAAATAAAATATGGGCTATATTT  
ACGGTTTTTCTACCCAAGAACAAGAAGATCTTGGACTTCTCTCTACAACCTCTAACCTGTTTTTTATTTTATACCCGATATAAA

9435

PRKN

PRKN-206

CACATAACCTTGACTAACTTGGCATTGAAGTTTTATTGGTGGGGAAGCTAGAGAAAAATGTCATGCCATAGAAGGAAATGGGAAGT  
GTGTATTGGAAGTATTGAACCGTAACTTCAAAGTAACCACCCCTTGATCTCTTTTTACAGTACGGTATCTTCCTTTACCCTTCA

9520

PRKN

PRKN-206

CTGAAGACCCGGTTTTGGTTGGGGGAAGGATGCTGCATTGTTCCAACATGATGGGAGTTGATGCCAGCTGAGTACGTGTGTTTGG  
GACTTCTGGGCCAAACCAACCCCTTCTACGACGTAACAAGTTGTAAGTACTACCCCTCAACTACGGTCGACTCATGCACACAAACCT

9605

PRKN

PRKN-206

GATGCCTAGCTGGCTGTTGAGAACTTGTGTCTGAGGACACTGAAAAAGAAAGGTTTCACTTATGGAACCTTCTATTAATCACAG  
CTACGGATCGACCGACAACCTTTGAACACAGACTCCTGTGACTTTTTCTTTCCAAGTATGAATACCTTGAAGATAATTTAGTGTC

9690

PRKN

PRKN-206

TTAAATGATTTAGGTGCCGAGAAGTTGGCAAACCTTTGTTTCATAGAAGAGTTTCACTGTAAAGACTAGGAAGTTACACATGTAATT  
AATTTACTAAATCCACGGCTCTTCAACCGTTTTGAAACAAGTATCTTCTCAAAGTGACATTTCTGATCCTTCAATGTGTACATTAA

9775

PRKN

PRKN-206

GCAAATTGATGGCTATGTTTTCTTTAAGTGTACAACCTGGCAGAATTTTAGCATCCTAGATATTCTTGTATAATCTTAGAACATAT  
CGTTTAACTACCGATACAAAAGAAATTCACATGTTGACCGTCTTAAAATCGTAGGATCTATAAGAACATATTAGAATCTTGTATA

9860

PRKN

PRKN-206

GTTTACAACCTATTTAGTCAATATCATTTAGTTACCCATTATCATTACAGGTGCTATATTTTACAGTATAAGCACAAAATATCTAA  
CAAATGTTGATAAATCAGTTATAGTAAATCAATGGGTAATAGTAAATGTCCACGATATAAAGTGTATATTTCGTGTTTTATAGATT

9945

PRKN

PRKN-206

TAATAAGTTGCTGCTGAGAAAAAGAAGATGGACCTTCCATATGAGCTACTTAATGCTTCCATTAATGAATGTTAAATATACACCT  
ATTATTCAACGACGACTCTTTTTCTTCTACCTGGAAGGTATACTCGATGAATTACGAAGGTAATTAATTACAATTTATATGTGGA

10,030

PRKN

PRKN-206

TGGTGTCTTGAAGAGAAGAAGAGATGGCTGGGGTGGTGTCTATGCTTGTCTGGGTGTCTTCTCCTCGTATTCTTTATCAT  
ACCACAGGACTTCTCTTCTTCTTCTACCGACCCACACAGATACGAACGACCCACAGAAGGAGGACCAAAGCATAAGAAATAGTA

10,115

PRKN

PRKN-206

AGGTGATATGAACATATATATTAGCTTATCATGCAAAATGAGATATTGTGAGTATAAAGAAGACCCGTCAATAATTATTCCAG  
TCCACTATACTTGTATATATAATCGAATAGTACGTTTTACTCTATAACACTCATATTTTCTTCTGGGACAGTTATTAATAAGGTC

10,200

PRKN

PRKN-206

GACAAAATTATATGTTGGGAGTGTCTTAGGAAAAGTGGAGGCAATGGTCACCCACATACTGAGCAGTATCTCTCACACTTAGTTT  
CTGTTTTAATATACAACCCCTCACAGGATCCTTTTGACTCCGTTACCAGTGGGGTGTATGACTCGTCATAGAGAGTGTGAATCAAA

10,285

PRKN

PRKN-206

CACCTTCTTTGAGGAGGAAATTAGTTTTAGTGCCTCACCTCAGGTACTTTGGGGAAGTATAGCTTGAGACCACAGTCTTATGAAA  
GTGGAAGAAACTCCTCCTTTAATCAAAATCACGGAGTGGAGTCCATGAAACCCCTTGATATCGAACTCTGGTGTGAGAATACTTT

10,370

PRKN

PRKN-206

TGTCATAATTTTAAAAAGCGAGTTTGTCTATTTAACTGGCAAAGGGTATTTGTAAGATTATAATAGAATTGATGTCACATCTAAA  
ACAGTATTAAAATTTTCGCTCAAACAGATAAATTGACCGTTTTCCATAAACATTCTAATATTATCTTAACTACAGTGTAGATTT

10,455

PRKN

PRKN-206

AAATTTTCATAGAATTTTCAGTTCTGGGAGAGCATATCCACAGGCCACTTAGAGAAGCACTGTTAGAGTATAGTTATTTTCATTA  
TTTAAAAGTATCTTAAAAGTCAAGACCCCTCTCGTATAGGTGTCCGGTGAATCTTTCGTGACAATCTCATATCAATAAAAAGTAAT

10,540

PRKN

PRKN-206

CACACTCATCTGTTTCAGTTTTGTTATTGGCAAGACTTTAAGAACTTTAAAAAATTAAGGAAAAATGGAAAAAATATAGACATTGA  
GTGTGAGTAGACAAGTCAAAACAATAACCGTTCTGAAATTTCTTGAAATTTTTAATTTTCTTTTACCTTTTTTATATCTGTAAGT

10,625

PRKN

PRKN-206

AAACGAATGATCTGGCACAGATTTTGTCTTCTGGGAAGCTGGAGTAGGCATACTTTTCCCTCTTCTCCCAGCAACTACACTAAA  
TTTGCTTACTAGACCGTGTCTAAAACGAAGACCCCTTCGACCTCATCCGTATGAAAAGGGAGAAGGAGGGTCTGTGATGTGATTTT

10,710

PRKN

PRKN-206

AGCCTAGACATTGCATATTGTACAGTTGACTCGTGGAGTCATGGAGTTAGGGGTGCCAACCGCTATGTAGACAAAACCTCATGTAT  
TCGGATCTGTAACGTATAACATGTCAACTGAGCACCTCAGTACCTCAATCCCACGGTTGGCGATACATCTGTTTTGAGTACATA

10,795

PRKN

PRKN-206

ACTTTTATCTCCCCTCACACTTTACCAGTAGTCTGCTATTGACGGGAAGCCTTACTGATACCATGAACAGTTGATTAATACATAT  
TGAAAATAGAGGGGAGTGTGAAATGGTCATCAGACGATAACTGCCCTTCGGAATGACTATGGTACTTGTCAACTAATTATGTATA

10,880

PRKN

PRKN-206

TTTTCATATGTAATATGTAAGTGTACTGTATGCTTATAATAAAAAAAGTGGAGAAAACATTAACAGCATTACAAAAAGGAGAGAGGATACT  
AAAAGTATACATTATACATGACATACGAATATTATTTTTTTGATCTCTTTTGTAAATTGTCGTAATGTTTTTCTCTCTCCTATGA

10,965

PRKN

PRKN-206

TACTATTCATTAAGTAGAAGTGGATCATCAAGATTTTCATTGTCTTTGTCTTCATGTTGAGTAGGCTAAAGAGGAAGAGGAAGAG  
ATGATAAGTAATTCATCTTCACCTAGTAGTTCTAAAAGTAACAGAAAACAGAAGTACAACCTCATCCGATTTCTCCTTCTCCTTCTC

11,050

PRKN

PRKN-206

GGGGAGTTAGTCTCACTGTCTCAGGGGTGGCAGAGGCAGAAGAAAATCTGCATATAAAATGGACCCATGCAGTTTCAACCCATGTT  
-----  
CCCCTCAATCAGAGTGACAGAGTCCCCACCGTCTCCGTCTTCTTTTAGACGTATATTTACCTGGGTACGTCAAAGTTGGGTACAA

11,135

PRKN

PRKN-206

ATTCAAGGGTCCGCTGTACAAGCTTAGGAAGATTCTGAAAGTAGTGAGAAGAATGTGGACAGAGTAGGGATTTTAGAACCCAAGG  
-----  
TAAGTTCCCAGGCGACATGTTTCAATCCTTCTAAGACTTTCATCACTCTTCTTACACCTGTCTCATCCCTAAAATCTTGGGTTC

11,220

PRKN

PRKN-206

AAGAATCCAGAGGTGAATTTCTTGAGTTTTCTTTTTGCTACGTTACCTCAGATGTGGAAGCTGAAGAAGCTGGCAACCAGGAAATG  
-----  
TTCTTAGGTCTCCACTTAAAGAACTCAAAGAAAAACGATGCAATGGAGTCTACACCTTGACTTCTTCGACCGTTGGTCTTTTAC

11,305

PRKN

PRKN-206

TCAACATATATAGACAAAAAGAAAAGAGAAGAAAAAAGAAGCAGAGAGGGAAGGGGAGGGGCAGAGAGAGAGAGAGAGAGAGAGA  
-----  
AGTTGTATATATCTGTTTTCTTTCTCTTCTTTTTCTTCGTCTCTCCTTCCCTCCCCGTCTCTCTCTCTCTCTCTCTCTCTCT

11,390

PRKN

PRKN-206

AGGGAGGGGTAAAGGAAGGGGGAAGGGGAAGGGAAAAAGGAAGAAAGGAAGGAAGGAAGAAATCCCCAACAAATGGCCTGTTTTTAT  
-----  
TCCCTCCCCATTTCTTCCCTTCCCTTCCCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTT

11,475

PRKN

PRKN-206

CCAGAGGACTCAGAAAGGGGCTGCCTAGCAACATAGAAAACATTTAGACAATAACCAGTCTACTCCAGCCAAATGCAACAGAAAA  
-----  
GGTCTCCTGAGTCTTTCCCGACGGATCGTTGTATCTTTGTAAATCTGTTATTGGTCAGATGAGGTCGGTTTACGTTGTCTTTT

11,560

PRKN

PRKN-206

ACTGCGGCCCTATCCTTGTCACCAACACTAGTAAAGGCTGAGTGGAGAGCCTCTTGTTTGAATTTCTGAAATAAAACACTC  
-----  
TGACGCCGGGATAGGAACAGGGGTGGTTGTGATCATTTCCGACTCACCTCTCGGAGAACAACCTTTAAAGACTTTATTTTGTGAG

11,645

PRKN

PRKN-206

ACTGATGGGTTTGACATAAGAATGGAAGGAACAGAGAAAAAGAGTCAGTGAAGCTGGAAGTTGGAACATAGAAATGACACGGTCCAA  
-----  
TGACTACCCAAACTGTATTCTTACCTTCCCTTGTCTCTTTTCTCAGTCACTTGACCTTCAACCTTGTATCTTTACTGTGCCAGGTT

11,730

PRKN

PRKN-206

ATGGCAAAGAAAAGGTAGGCTGGAAAAAGAAAAAGGAATAGAGCCTCAGAGACCTGTGGTTCTCCAACAGAGCATTTAAAGTTT  
-----  
TACCGTTTCTTTTCCATCCGACCTTTTTCTTTTTCTTTATCTCGGAGTCTCTGGACACCAAGAGGTTGTCTCGTAAATTTCAA

11,815

PRKN

PRKN-206

GTGTCAGGGGATTCTTGGAAAGGAGAAGATAATGGTGGGCAAATGCTCAAAGAAATAAGTGTGGAAACTTCCAAAGTTTGAAGA  
-----  
CACAGTCCCCTAAGGACCTTCTTCTTATTACCACCCGTTTACGAGTTTCTTTATTACAAACCTTTGAAGGTTTCAAACGTTCT

11,900

PRKN

PRKN-206



GACATAAAGTTATAGATGGATTTATAAAGCTGAGTGAATCTAAAACAGGAAAAACCCAAAGAAACCCACACCAACACACAACGTA  
CTGTATTTCAATATCTACCTAAATATTTTCGACTCACTTAGATTTTTGTCTTTTTGGGTTTCTTTGGGTGTGGTTGTGTGTTGCAT

11,985

PRKN

PRKN-206

ATTCAACTTCTTAAACTAAAGACAAATTTTAGATCTTGAAAGAAGCCAGAGAAATATCACACCTTCCCTATAGGGCTAACATTG  
TAAGTTGAAGAATTTGATTTCTGTTTAAATCTAGAACTTCTTCGGTCTCTTTATAGTGTGGAAGGGATATCCCGATTGTAAC

12,070

PRKN

PRKN-206

TTCTAATTACAGTGGATTTCTCATCAGAAACCATGAAGGCTAGAAGGAAGTGGCACAATGTTTTTCAAATGCTGAAAGAAAAGAA  
AAGATTAATGTCACCTAAAGAGTAGTCTTTGGTACTTCCGATCTTCTTTCACCGTGTTACAAAAAGTTTACGACTTTCTTTTCTT

12,155

PRKN

PRKN-206

CTGCCAACCTGTAATATTATACCCAGTGAAAATGTCGTTTCAGGAAGAAAGAACAAATCAATACTTTTTTTTTTAGATAAAGAAAA  
GACGGTTGGACATTATAATATGGGTCACTTTTACAGCAAGTCTTCTTTCTTGTTTAGTTATGAAAAAAAAAATCTATTTCTTTT

12,240

PRKN

PRKN-206

ACTAAGCGAATTTGTCACCAGCAGACCTACCCTAAAAGAATGGCTAAAGAAATTTCTAAACAAATGAAACAACAAAAAAGGAA  
TGATTCGCTTAAACAGTGGTCGTCTGGATGGGATTTTCTTACCGATTTCTTTAAAAGATTTGTTTACTTTGTTGTTTTTTTCTT

12,325

PRKN

PRKN-206

TTTTGGAACACTAGGAAGGAGGGAAAAACATAGTAAGCAAAAATATGGTTAAATACAATGCACTGTTTTTCTCCTCTTGAGTTTT  
AAAACTTGTGATCCTTCTCCTTTTTGTATCATTTCGTTTTTATACCAATTTATGTTACGTGACAAAAAGAGGAGAAGTCAAAA

12,410

PRKN

PRKN-206

CTAAATTATGTTAGAGGGTTGCAGCAAAAAGTTATAGCATTGTCTAATGTAGTTCTACATGTAGAAGAAACATTTTCAGGCAAAACAT  
GATTTAATACAATCTCCAACGTCGTTTTCAATATCGTAACAGATTACATCAAGATGTACATCTTCTTTGTAAAGTCCGTTTGTA

12,495

PRKN

PRKN-206

AAACACAGATGCAAGGAAAAGGTAAGATTTCTAAACTTGACCTACAAAATAGCAACTGCAGTAGAGCATGACAAGTTAAGAATGTA  
TTTGTGTCTACGTTTCTTTCCATTCTAAAGATTTGAACTGGATGTTTTATCGTTGACGTCATCTCGTACTGTTCAATTTCTTACAT

12,580

PRKN

PRKN-206

TAAAGAAATATCTAGAGTAATAGGTAAAGTAGGTAAATTTAAAATACAAAATAAAGACAACACCAAATGCTGGTGAGGATGTGGAG  
ATTTCTTTATAGATCTCATTATCCATTTTCATCCATTTAATTTTATGTTTTATTTCTGTTGTGGTTTACGACCACTCCTACACCTC

12,665

PRKN

PRKN-206

AAATTGGATTACTCGCAAATTTGCTACTGGGAATATAAAATGGTAGAACCACTCTGGAAAAGAATATAGCAGTTTCATAAAAAATG  
TTTAACCTAATGAGCGTTTAAACGATGACCCTTATATTTTACCATCTTGGTGAGACCTTTTCTTATATCGTCAAAGTATTTTTTAC

12,750

PRKN

PRKN-206

ACATATGTAATTTACCAGATGACAGAGTTATACTCTTAGTTATTTATCCTAGAGAAATGAAGACGTAGGTACACACACAAATCTGT  
TGTATACATAAATGGTCTACTGTCTCAATATGAGAATCAATAAATAGGATCTCTTTACTTCTGCATCCATGTGTGTGTTTAGACA

12,835

PRKN

PRKN-206

ATATGAATGTTTATAGCAGTTTTTATTACATTAGCAGAACACGGAAACAACCTCTGATGTCTTTTCAGTGGATCTGTGGTTCAACAA  
TATACTTACAAATATCGTCAAAAATAAGTGTAATCGTCTTGTGCCTTTGTTGAGACTACAGAAAAGTCACCTAGACACCAAGTTGTT

12,920

PRKN

PRKN-206

ACTGGTACCTCCACACCCTAGAATATTACTCAGCAGTAAAAAGGAGCCGACTGTTGATATACAAAATATCTTGGATGGATCTCA  
TGACCATGGAGGTGTGGGATCTTATAATGAGTCGTCATTTTTCTCGGCTGACAACCTATATGTTTTATAGAACCTACCTAGAGT

13,005

PRKN

PRKN-206

GGGGAAATGTGCTGTGTGGAAAAAGCCCATCCCCAAAGATCGTACACTGAATAATTTTTATTTATATAACATTCTCAAAACGACAA  
CCCCTTTACACGACACACCTTTTTTCGGGTAGGGGTTTCTAGCATGTGACTTATTAATAAATATATTGTAAGAGTTTTGCTGTT

13,090

PRKN

PRKN-206

AATGATAGAAATGGAGGGCAGATTCATGCTTCCAGCAGTTCTGAAGGGGGTGAAGCAGGTGAGAGGGGGTACGACTGTGAAA  
TTACTATCTTTACCTCCCGTCTAAGTACGAAGGGTCGTCGAAGACTTCCCCACCTTCGTCCACTCTCCTCCCATGCTGACACTTT

13,175

PRKN

PRKN-206

GGGTAACAGAAGGGACCCTTTGGTGACGGCCGTCTCTGTGCTGACTGTAACAATGCTTATAGTACAATTATAACGTCTAGCTTG  
CCCATTGTCTTCCCTGGGAAACCACTGCCGGCAGGAGACACGACTGACATTGTTACGAATATCATGTTAATATTGCAGATCGAAC

13,260

PRKN

PRKN-206

GCAAGATGTTACCACTGGCGGAAGCTGGGGAAAAGGTAGCTGGCATCTTTCTCTGCTATCTCTTACAACCTGCGTTAGAATGTGTA  
CGTTCTACAATGGTGACCGCCTTCGACCCCTTTTCCATCGACCGTAGAAAAGAGACGATAGAGAATGTTGACGCAATCTTACACAT

13,345

PRKN

PRKN-206

AGCATTTTAAATATAAAGTTGAATTTAAAAAAAACCTAGGATATCTGTCCACTTTTCACAGAGGAATTGAAACTATCACTTTCTTAG  
TCGTAATAATATATTTCAACTTAAATTTTTTTGGATCCTATAGACAGGTGAAAGTGCTCCTTAACTTTGATAGTGAAAGAATC

13,430

PRKN

PRKN-206

AAAATAAGCTTGCTATTTGTCTCTCTTTTAAAGGGAGAGTATGTATTCAATGAGTGATATTTAACATAAGAAATGAGAAAAATAA  
TTTTATTGGAACGATAAACAGAGAGAAAAATTTCCCTCTCATACATAAGTTACTCACTATAAATTGTATTCTTTACTCTTTTTATT

13,515

PRKN

PRKN-206

TTTAATTGATTAGCAGACACATTTAAAGACTTGTTCATACTAAGAGTACAGGGTGAGTAAAACCTTATAGAGACATTAATGCCTCT  
AAATTAACATAATCGTCTGTGTAATTTCTGAACAAGTATGATTCTCATGTCCCACTCATTTTTGAATATCTCTGTAATTACGGAGA

13,600

PRKN

PRKN-206

TTCTTGAAGCCTTTTTTATTTATTTATTTATTTTGGAGACAGAGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAATGGCACA  
AAGAACTTCGGAAAAAATAAATAAATAAATAAAAAAACTCTGTCTCAGAGCGAGACAGCGGGTCCGACCTCACGTTACCGTGT

13,685

PRKN

PRKN-206

ATCCCTGCTCACTGCAAGCTCCGCCTCCCGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCGCC  
TAGGGACGAGTGACGTTTCGAGGCGGAGGGCCCAAGTTCGCTAAGAGGACGGAGTTCGGAGGGCTCATCGACCCTAATGTCCGCGGG

13,770

PRKN

PRKN-206

GCTACCACGCCTGGCTCATTTTTGTGTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACCTCTGACCTC  
CGATGGTGCAGGACCGAGTAAAAACACAAAAATCATCTCTGCCCAAAGTGGTACAACCGGTCCGACCAGAACTTGAGGACTGGAG

13,855

PRKN

PRKN-206

AGGTGATCCACTCATCTTGTCTCCCAAAGTGCTGAGATTACAGGCATGAGCCACCACTCCTGGCCTCTTTCTTGAAGTCTTAAA  
TCCACTAGGTGAGTAGAACAGGAGGGTTTCACGACTCTAATGTCCGTACTCGGTGGTGAGGACCGGAGAAAGAACTTCAGAATTT

13,940

PRKN

PRKN-206

CAGAATTTTTAGCACATTATAGATCTGAATAGACATGATGAGTATTTATTTGCAAACCTCTTTACCAAATATTTAAACTAAGCAA  
GTCTTAAAAATCGTGTAATATCTAGACTTATCTGTACTACTATAAATAAACGTTTGAGAAATGGTTTATAAATTTGATTGTTTT

14,025

PRKN

PRKN-206

AGTAAATAGTTCTTGACAATTGTGTACTCCAGTTGTACATAGTTTTTAAATTGATTTGTTAGTCATACATTATAATTTTAGGAAA  
TCATTTATCAAGAAGTGTAAACACATGAGGTCAACATGTATCAAAAATTTAACTAAACAATCAGTATGTAATATTAATAATCCTTT

14,110

PRKN

PRKN-206

TAAATGAGCCAGATCGGGCACAGTGGCTCATGCCCGTAATCCCAGCACTTTGGGAGGCCAAGACAGGCAGATCACGAGGTCAGGA  
ATTTACTCGGTCTAGCCCGTGTACCGAGTACGGGCATTAGGGTCGTGAAACCTCCGGTCTGTCCGTCTAGTGCTCCAGTCCT

14,195

PRKN

PRKN-206

GTTCGACACCAGCTTGACCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATCACCTGTAATCCCAGCTACGTGGAAGG  
CAAGCTGTGGTTCGAACTGGTTGTACCACTTTGGGGCAGAGATGATTTTTATGTTTTTAGTGGACATTAGGGTCGATGCACCTTCC

14,280

PRKN

PRKN-206

CTGAGGCGGAGAATCTCTTGAACCTGGGAGGCGGAGGTGGCAGTGAGCCAAGATTGCGCCATTGCACTCCAGCCTGGGCCACAAA  
GACTCCGCCTCTTAGAGAAGTTGGACCCTCCGCCTCCACCGTCACTCGGTTCTAACGCGGTAACGTGAGGTTCGGACCCGGTGT

14,365

PRKN

PRKN-206

GAGACTCTGTTTCAAAAAAAAAAAGGAAACAGATGATCTGCTGTGGTTATAGAGTAAACATTAGTAACATATTTATGTAATAGA  
CTCTGAGACAAAGTTTTTTTTTTTTCTTTGTCTACTAGACGACCAATATCTCATTTGTAATCATTGTATAAATACATTATCT

14,450

PRKN

PRKN-206

ATTTAGGGATGTAATGGCTTCATTTCTGAACTAAATTTATTGAAATTTTCATGGTTTTTTTTGGTAATTTATTCAAATTTTTTTTTT  
TAAATCCCTACATTACCGAAGTAAAGACTTGATTTAAATAACTTTAAAGTACCAAAAAAAAACCATTAAATAAGTTTAAAAAAAAA  
PRKN >

PRKN-206 >

TTTTTTTTTTTTTTTTTTTTGGAGATGGAGTCTTACTCTGTGCGCTAGGCTGGAGTGCAATAGCATGATCTTGGCTCACTGCAACC  
AAAAAAAAAAAAAAAAAACCTCTACCTCAGAATGAGACAGCGGATCCGACCTCACGTTATCGTACTAGAACCAGTGACGTTGG  
PRKN >

PRKN-206 >

TCTGCCTCCCAGGTTCAAGTGATTCTCCTGCCTCAGCCTCTCAAGTCGCTGGGATTTCAAGCATGTACCACCACACCCAGCTAAT  
AGACGGAGGGTCCAAGTTCACTAAGAGGACGGAGTCGGAGAGTTTCAGCGACCTAAAGTCCGTACATGGTGGTGTGGGTCGATTA  
PRKN >

PRKN-206 >

TTTTGTATTTTTAGTAGAGATTGCTTTTTCTATTGACTATAAAACAGAAAGAGGCTAGTATCAATTTAGAGCACTGAATACATTT  
AAACATAAAAAATCATCTCTAACGAAAAAGATAACTGATATTTGTCTTTCTCCGATCATAGTTAAATCTCGTGACTTATGTAAA  
PRKN >

PRKN-206 >

CCACCATGATTTTTGTTTGTATATAAAAAGAATTCTGCAATGACCAATATAGTTCCTATTTTAACTGATTATAAGATAAAAAGGA  
GGTGGTACTAAAAACAACATATATTTTTCTTAAGACGTTTACTGGTTATATCAAGGATAAAATTGACTAATATTCTATTTTTCT  
PRKN >

PRKN-206 >

GGCCAGGCTCAATACCATTATACCCAGAGCACAGTCACGCAGTGATTTATTTCTGTGTAAGAGATTGGTCATGTAAATGAGATGC  
CCGGTCCGAGTTATGGTAATATGGGTCTCGTGTCAGTGCGTCACTAAATAAAGACACATTCTCTAACCAGTACATTTACTCTACG  
PRKN >

PRKN-206 >

TCATTTCACTACAGGACTGATACAAGCATCTTCTCTCTGAAGGTTTGCCTTGCAATGGAACCTTACTGCTGGCCTCCTTTATTTAG  
AGTAAGTGATGTCCTGACTATGTTTCGTAGAAAGAGAGACTTCCAACGGAACGTTTACCTTGAATGACGACCGGAGGAAATAATC  
PRKN >

PRKN-206 >

GCAATGTACATATCCTCTTGAGTTCCTCCAAGAAGCAGGTACATTATTATACGAACTAGTAAGTGTTGCTACGTGTCCGAGTCT  
CGTTTACATGTATAGGAGAACTCAAGGAGGTTTCTTGTCCATGTAATAATATGCTTGATCATTACAACGATGCACAGGCTCAGA  
PRKN >

PRKN-206 >

AGAATCAAAGAATGATCATCTGTACAGGGCAAATGCTCACTTTGGGAAGACCGTTATTTTCATCTATTTGTGTCTGGTTGCCTCTA  
TCTTAGTTTTCTTACTAGTAGACATGTCCCCTTACGAGTGAAACCCTTCTGGCAATAAAGTAGATAAAACACAGACCAACGGAGAT  
PRKN >

PRKN-206 >

CATGTCAGAAAGTATCCCTGAATGACTTACCTCTTTGCATAATTCAGAACTCTCAGAAATGTTATTTTTCTTTGAAAGGAAGCCT  
GTACAGTCTTTTCATAGGGACTTACTGAATGGAGAAACGTATTAAGTCTTGAGAGTCTTTACAATAAAAAGAAACTTTCTTCGGA  
PRKN >

PRKN-206 >

TGACATTTCTGTGCCCATGTGGACTTACAAAACATCTCTGAGGATTGCCATCAATAAGCATAGACTTGAAGAAAAAAAAAAGCT 15,385  
ACTGTAAAGACACGGGTACACCTGAATGTTTTGTAGAGACTCCTAACGGTAGTTATTTCGTATCTGAACTTCTTTTTTTTTTTTCGA  
PRKN >  
PRKN-206 >

AAGATTCTTATAGCTTATAAGATGCTGAAGATATATAGTCTGTGGATTCAATTAATAGGCTCTCATCTCATAGATGTTTCCATTG 15,470  
TTCTAAGAATATCGAATATTCTACGACTTCTATATATCAGACACCTAAGTAAATTATCCGAGAGTAGAGTATCTACAAAAGGTAAC  
PRKN >  
PRKN-206 >

TGATTACACTCACATTTCCAAGGCAAGCAATGTGTGAGAGGGTGAAACTCTGCAGCAATCCAATCTCCAAACTCTTAACATAGGAT 15,555  
ACTAATGTGAGTGTAAGGTTCCGTTTCGTTACACACTCTCCCACTTTGAGACGTCGTTAGGTTAGAGGTTTGAGAATTGTATCCTA  
PRKN >  
PRKN-206 >

GCATCTTATTAGGGTACAGGAAACCTGATAAATGACAGAGAAGAGATGCCATACTGAAACTGTGTTACTGTTCACTGAAAGTCCTA 15,640  
CGTAGAATAATCCCATGTCCTTTGGACTATTTACTGTCTCTTCTCTACGGTATGACTTTGACACAATGACAAGTGACTTCAGGAT  
PRKN >  
PRKN-206 >

GTTTCAGATATTCTGTTGTCTCCATTATTGGACTAAGATTCCATCATCCAATTGACCTGATGTTATCTGAGATTTTGCTTAATAC 15,725  
CAAAGTCTATAAGACAACAGAGGTAATAACCTGATTCTAAGGTAGTAGGTTAACTGGACTACAATAGACTCTAAAACGAATTATG  
PRKN >  
PRKN-206 >

AGTCATCATCCTTTAGGGAAGAATTTAAGAAATGAGAGGTTGTGTCTATACACCCAAAAGCTCTGAACCCAAAGATGATTCCTG 15,810  
TCAGTAGTAGGAAATCCCTTCTTAAATTCTTTACTCTCCAACACAGATATGTGGGTTTTTCGAGACTTGGGTTTTCTACTAAGTGAC  
PRKN >  
PRKN-206 >

AAATTCCATCTTTACTTTTTCCCTTTTTACTAAGTCATTGTAACAAGCCTGAGATGACTGTCAAGGAACAATAAGATTGTATAT 15,895  
TTTAAGGTAGAAATGAAAAAAGGGAAAAATGATTCAGTAACATTGTTTCGGACTCTACTGACAGTTCCTTGTTATTCTAACATATA  
PRKN >  
PRKN-206 >

GAGAAACTTCTTTGAAGCTTATATACCAAACCTCACTTATGATGAATACATATGGGAGTATGTGTGCTCCTTCATTTTTCTATTTAT 15,980  
CTCTTTGAAGAACTTCGAATATATGGTTTGAGTGAATACTACTTATGTATACCCTCATACACACGAGGAAGTAAAAGATAAATA  
PRKN >  
PRKN-206 >

ATATGGGCTTGGGTCATAGCTTTAATTAATAAGTTACCATTAGTAAATATTTATTCCAGCATTGATCTTCCTTAGATATAAGTTA 16,065  
TATACCCGAACCCAGTATCGAAATTAATTATTCAATGGTAATCATTTATAAATAAGGTCGTAACCTAGAAAGGAATCTATATTCAAT  
PRKN >  
PRKN-206 >

AATGGCAGATGAAGTTAAATGTGTGGGATGTGATCCTTTATGTTATAATAGTTTATGTTAAAGTATAACTTTAGTGATGCCATA 16,150  
TTACCGTCTACTTCAATTTACACACCCTACACTAGGAAATACAATATTATCAAATACAATTTTCATATTGAAATCACTACGGGTAT  
PRKN >  
PRKN-206 >

AGACACAGAAAAACACAATTTAAATGGGAATGGGAGAGTCTGGCCTAATATGTTGTGTTAACTTTTTTTTTTCAAATATTAGGTTTAA  
TCTGTGTCTTTTGTGTTAATTTACCCTTACCCTCTCAGACCGGATTATACAACACAATTTGAAAAAAAAAGTTTATAATCCAAATT

16,235

PRKN

PRKN-206

TATTGATAAAAAATAAAATTATCATAAACAATTTAGCAGCAGAAGTTAAATTAACTGAAATTCACATTGGACAAGTGAAGATTGCC  
ATAACTATTTTTATTTAATAGTATTTGTTAAATCGTCGTCTTCAATTTAATTGACTTTAAGTGTAACCTGTTCACTTCTAACGG

16,320

PRKN

PRKN-206

ATAGTAGCCTTTGTAAAGCACAGAAGGATGGGCTGAAAGATCTTTCTTTGGCCATGTGCTAAATCAGAGGATGCACAGACTCATT  
TATCATCGGAAACATTTTGTGTCTTCTACCCGACTTTCTAGAAAGAAACCGGTACACGATTTAGTCTCCTACGTGTCTGAGTAA

16,405

PRKN

PRKN-206

TGAATGGAGGCAGAACATCAAGTATTTACTGAATTGTTGGGCAAGCCCATGATTTATAAAGTTGGTGTCAGTATAGTGTCTAGT  
ACTTACCTCCGTCTTGTAGTTCATAAATGACTTAACAACCCGTTTCGGGTACTAAATATTTCAACCACAGTCATATCACAAGATCA

16,490

PRKN

PRKN-206

ATCAATTGTTTTTGGATTTTTAAAAAATGTTTTAGCCTTTTGTACATATATGTCTTCACACAGAGAAGCATAACATTCATTTGGGG  
TAGTTAACAAAAACCTAAAAATTTTTTACAAAATCGGAAAACATGTATATACAGAAGTGTGTCTCTTCGTATGTAAGTAAACCCC

16,575

PRKN

PRKN-206

AATGCATTTCTGGGAAAAATTATAATTTTTGTGGGTGTACTTGTGTAACTGCATTGGATTGAAGATTTTTATTCTGTCATTGAA  
TTACGTAAAGGACCTTTTTAATATTAAAAACACCCACATGAACACATTTGACGTAACCTAACTTCTAAAAAAGACAGTAACTT

16,660

PRKN

PRKN-206

TTTTATTTTGCATGGAATGTTTCTTGTCTTATTATTTGTTCTGGATACTTTGCATTCAGAGGTGTCACCTCAGATAAGATTTAATA  
AAAATAAAACGTACCTTACAAAGAACAGAATAATAAACAAGACCTATGAAACGTAAGTCTCCACAGTGAGTCTATTCTAAATTAT

16,745

PRKN

PRKN-206

TGTAGACTAATTATGGCACAGAACTCTGCTTTTTAAATTAATAGAATATTCTGACATTAGAGGGGAGAAAATGAGGAATGCGAGAAC  
ACATCTGATTAATACCGTGTCTTGAGACGAAAAATTAATTATCTTATAAGACTGTAATCTCCCTCTTTACTCCTTACGCTCTTG

16,830

PRKN

PRKN-206

CCACTGATGTTTGTGTTTTGAGTACATCACAAACTCAATTTCAAATATGTGGGCTTTTGAAAGCTCAGTGCAGGTTTTGCCAAGG  
GGTGACTACAAACACAAAACCTCATGTAGTGTGTTGAGTTAAAGTTTATACACCCGAAAACCTTTCGAGTCCAGTCCAAAACGGTTCC

16,915

PRKN

PRKN-206

ATATTTTCTGCTCATTTTTATAGGCTTACATATTTCAAAGGGAATTTGGGCTGTGTGTTTGCATTCATCTATGCGTAATTCATC  
TATAAAAGACGAGTAAAAATATCCGAATGTATAAAGTTTCCCTTAACCCAGACACACAAAACGTAAGGTAGATACGCATTAAGTAG

17,000

PRKN

PRKN-206

AAAAACATTGTTTCAGAAAAACAGGAAATAAACACAAACATTTGTTTAAAGATAGTTCTAGTGTTATTTAAACCTTGGACACTAAGAA  
-----  
TTTTTGTAAACAAGTCTTTTGTCTTTATTTGTGTTTGTAAACAAATTCTATCAAGATCACAAATAAATTTGGAACCTGTGATTCTT

17,085

PRKN

PRKN-206

CTTCAGAACCTGCTAAAGTGGTTAATTAACATCTGCTTCCTCAGTTTACCTGTTTTGTACCTTGGAGTCAATTCTCATTGAGG  
-----  
GAAGTCTTGGACGATTTACCAATTAATTGTAGACGAAGGAGTCAAATGGACAAAACATGGAACCTCAGTTAAGAGTAAAACTCC

17,170

PRKN

PRKN-206

AACATTGAGATACATGCTGTTCTTGTAGGAGCCTAAAACTTTTTATATGTTTTTTTTCATTCCAAGGGAGTTTTATGATGCC  
-----  
TTGTAACCTCTATGTACGACAAGAACATCCTCGGATTTTGAAAAATATACAAAAAAGTAAGGTTCCCTCAAAATACTACGG

3'

17,251

5'

PRKN

PRKN-206

Feature	Location	Size			Type
✓ <b>PRKN</b>	1 .. 17,251	17,251 bp		→	gene
/note	= gene <a href="#">ENSG00000185345</a> Protein coding				
<b>PRKN-201</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000338468</a> Nonsense mediated decay				
<b>PRKN-202</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000366892</a>				
<b>PRKN-203</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000366894</a> Nonsense mediated decay				
<b>PRKN-204</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000366896</a>				
<b>PRKN-205</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000366897</a>				
✓ <b>PRKN-206</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000366898</a>				
<b>PRKN-207</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000479615</a> Nonsense mediated decay				
<b>PRKN-215</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000674232</a> Retained intron				
<b>PRKN-217</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000674259</a> protein_coding_CDS_not_defined				
<b>PRKN-221</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000674493</a> protein_coding_CDS_not_defined				
<b>PRKN-222</b>	1 .. 17,251	17,251 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000674501</a> Retained intron				
<b>PRKN-210</b>	1 .. 7421	7421 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000648830</a> protein_coding_CDS_not_defined				
<b>PRKN-211</b>	7256 .. 17,251	9996 bp		→	prim_transcript
/note	= primary transcript <a href="#">ENST00000673871</a> Nonsense mediated decay				
<b>PRKN-202</b>	7258 .. 7421	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence <a href="#">ENSP00000355858</a>				
/translation	= FVRFNSSHGFPVEVDSDTISIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				
<b>PRKN-204</b>	7258 .. 7421	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence <a href="#">ENSP00000355862</a>				
/translation	= FVRFNSSHGFPVEVDSDTISIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				
<b>PRKN-205</b>	7258 .. 7421	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence <a href="#">ENSP00000355863</a>				
/translation	= FVRFNSSHGFPVEVDSDTISIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				



Feature	Location	Size			Type
✓ <b>PRKN-206</b>	7258 .. 7421	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence <a href="#">ENSP00000355865</a>				
/translation	= FVRFNSSHGFPVEVDSDTISIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				
✓ <b>Donor Sequence SNV -&gt; REV</b>	7308 .. 7407	100 bp		⇐	misc_feature
✓ <b>PAM</b>	7367 .. 7369	3 bp		⇐	misc_feature
✓ <b>gRNA Protospacer Sequence</b>	7370 .. 7389	20 bp		⇐	misc_feature
✓ <b>SNV</b>	7375 .. 7375	1 bp		⇐	misc_feature
/note	= SNV = C REV = G				

Primer	Length	Binding Sites	Tm	Date Added
✓ <b>PCR Forward</b>	25-mer	6866 .. 6890	58°C	Aug 18, 2023
/sequence	=	TTTATTAAGAGGGTCACTGTGGAGG 44% GC / 7792.2 Da		
✓ <b>Donor Template SNV -&gt; REV</b>	100-mer	7308 .. 7407	81°C	Aug 18, 2023
/sequence	=	GACACCAGCATCTTCCAGCTCAAGGAGGTGTTGCTAAGCGACAGGGGGTTCCGGCTGACCAGTTGCGTGTGATTTTCGCAGGGAA 56% GC / 13341.0 Da		
✓ <b>gRNA Protospacer</b>	20-mer	7370 .. 7389	52°C	Aug 18, 2023
/sequence	=	CTGCGAAAATCACAGGCAAC 50% GC / 6104.0 Da		
✓ <b>Sanger Sequencing Primer</b>	20-mer	7590 .. 7609	56°C	Aug 18, 2023
/sequence	=	CCTGCTTGCTGTTTTAATGC 45% GC / 6065.0 Da		
✓ <b>PCR Reverse</b>	25-mer	7820 .. 7844	58°C	Aug 18, 2023
/sequence	=	GGGTCACAATTGGGTTACAAATTCC 44% GC / 7681.1 Da		