

ASK2J00177_PRKN_R42P_C03.2_BB
16,274 bp

5'

3'

TATTTCAATATTTTTTGGGAATTCATTATGATTTTTGCTTGCTTTTTGGGTCAATATTTTTATTTCATTTTGATTTTTACTATAAG
ATAAAGTTATAAAAAACCTTAAGGTAATACTAAAAACGAACGAAAAACCCAGTTATAAAAAATAAGTAAAACTAAAAATGATATTC

85

PRKN

PRKN-206

AAATATAATGTCTGTCCTTAACTTCTTAGTTTTCTTCATTGTTAATATTGCTCCACTTCATAAAAAATAATAAAAGACCCATATTTA
TTTATATTACAGACAGGAATTGAAGAATCAAAGAAGTAACAATTATAACGAGGTGAAGTATTTTATTTATTTTCTGGGTATAAAT

170

PRKN

PRKN-206

CCCCGCACCTATTATGCCATACTTGGCATAACATATTATATGTTCTAAACTCCCCATGGAATAGAATTTCTGCTTTACCCAGTCAT
GGGGCGTGGATAATACGGTATGAACCGTATGTATAATATAACAAGATTTGAGGGGTACCTTATCTTAAAGACGAAATGGGTACAGTA

255

PRKN

PRKN-206

CTGCATTAATAAATTATGTTGAATAAAGCAAAAAAATTCCTACCTAATTATCTTCTGTATTTAGCACTTATGATGCTTTTTACTG
GACGTAATTTATTTAATACAACCTTATTTTCGTTTTTTAAGGATGGATTAATAGAAGACATAAATCGTGAATACTACGAAAAATGAC

340

PRKN

PRKN-206

TTTCTTGTGGATTTGAATCTCTGTCTTGTACCATTTCACTTCAGCCTGAAGAGTTTATTTGATATTTCTTGTGATATGAGTCTGC
AAAGAACACCTAAACTTAGAGACAGAACATGGTAAAGTGAAGTCGGACTTCTCAAATAAACTATAAAGAACACTATACTCAGACG

425

PRKN

PRKN-206

TTGTGATAAATTATCTTAATTTTTATTTAATCTTAAATATCTTTATTTTATTCTCATTTTTAAAAGATTTTTCACTGGATATAA
AACACTATTTAATAGAATTAATAAATAAATTAGAATTTTATAGAAATAAAATAAGAGTAAAAATTTTCTATAAAAAGTGACCTATATT

510

PRKN

PRKN-206

ACTTCTGCATTGACAAGCATTTTTTGTCTTTTTGTTTTCTTCTGAACCTGTAATATTGTGCCGTCACCTTCTGGACTCCATTGTTTC
TGAAGACGTAACCTGTTTCGTAAAAAACGAAAAACAAAAGAAGGACTTGACATTATAACACGGCAGTGAAGACCTGAGGTAACAAAG

595

PRKN

PRKN-206

TGACCAGAAGTTAACCCCTTAATTACATCATTTTTAACCCCTGTATGTGACAGACAAACTTTTTCTTGTGTTTTCAAAGCTTGTTTCT
ACTGGTCTTCAATTGGGAATTAATGTAGTAAATTTGGGACATACACTGTCTGTTTTGAAAAGAACAACAAAAGTTTTCGAACAAAGGA

680

PRKN

PRKN-206

TGTCTTTGGCTTTCCATAGTTTGACTATGCTATGATTTGCCTTGACACAAGCACGTTTCATATTTATCCTGCTTGACATTTGTTGA
ACAGAAACCGAAAAGGTATCAAACCTGATACGATACTAAACGGAACCTGTGTTTCGTGCAAGTATAAATAGGACGAACTGTAAACAACCT

765

PRKN

PRKN-206

ACATCTTGAATATGTAAATTTATTTATTTTCATCACATATTAATAATTTGAGGGCATTATTTTTTTGAAAAATTTTTCTGCCCATTC
TGTAGAACTTATACATTTAAATAAATAAAGTAGTGTATAATTTTAAACTCCCGTAATAAAAAACTTTTTAAAAAGACGGGGTAAG

850

PRKN

PRKN-206

TTTCATTTTTTTCTTTGTGACTCCAACAACATATATATTAGATCATTTTGATATTATCTAATATGTCCCTAACATCTATTCATTTAA
AAAGTAAAAAAGAAACACTGAGGTTGTTGTATATATAATCTAGTAAACTATAATAGATTATACAGGGATTGTAGATAAGTAAATT

935

PRKN

PRKN-206

AAACAATTCTTTATTCTTCACTAATGCTTTTCTCTTTAATCTCCATTTGGGTATTAAATTTATTTAACAGATTTTTATTCCAGGC
TTTGTAAAGAAATAAGAAGTGATTACGAAAGGAGAAATTAGAGGTAAACCCATAATTTAAATAAATTGTCTAAAAATAAGGTCCG

1020

PRKN

PRKN-206

AATTGTAGTTTTAGTTCTAGAATTTCTATTTGATTCTCTCTCTCTCTTTTTTTTTTTTTTTTTTTTTTAAAAATAGAGCTAAGGTCTCAC
TTAACATCAAAATCAAGATCTTAAAGATAAACTAAGAGAGAGAGAGAGAAAAAAGAAAAAATTTTATCTCGATTCCAGAGTG

1105

PRKN

PRKN-206

TGTATTGCTCAGGTTGATCTCAAACCTCTGGGCTCAAGTGATCTGCCCGTGTGGGCCTCCCAAAAAATTGCTAGGAGTGAGCCAC
ACATAACGAGTCCAACCTAGAGTTTGAGGACCCGAGTTCACTAGACGGGCACACCCGGAGGGTTTTTTTAAACGATCCTCACTCGGTG

1190

PRKN

PRKN-206

CATGCCCGGCCTGATTCCTTTTTATAATTTCTATTTCTCTGATTATCTGTCATATCTTTCCACTCATTGCAATTTTTTTTTTTTTT
GTACGGGCCGGACTAAGGAAAAATATTAAGATAAAGAGACTAATAGACAGTATAGAAAGGTGAGTAACGTTAAAAAAAAAAAAA

1275

PRKN

PRKN-206

TTTTTTACTCCTTTAAGGACAGTAATACTACTAGCTCCTTTAAAAATTTGTTTCCTAGTTTCAAATTAGAGTCATTTTCAGGGTT
AAAAAATGAGGAAATTCCTGTCATTATGATGATCGAGGAAATTTTAAAAACAAAGGATCAAAGTTTTAATCTCAGTAAAGTCCCAA

1360

PRKN

PRKN-206

TTGTCTCACTTGATTTTTCTTTTCTCCGAGAATGGTTTACTTTTCATGGTTCTTTGAAATGTTAGATACTTTTTAAATATATCGCA
AACAGAGTGAACATAAAGAAAAGAGGCTCTTACCAAATGAAAGTACCAAGAAACTTTACAATCTATGAAAATTTAATATAGCGT

1445

PRKN

PRKN-206

GACATTATAACGTAATTAAGGAGACTGAATTTCTGTAATTTTTTCTCCAGTGACCCCTGGTTCTTTGTTTGTGTTTGGGA
CTGTAATATTTGCATTAATGACCTCTGTGACTTAAGACATTAAGAAAGAGGTCCTGGAACCAAGAAACAAACAAACAAACCT

1530

PRKN

PRKN-206

AGACATTTATTTTGGTTGATCTTGAAAAGAAAATCTGTTCTTTGTGTGCAAGTCTGATCTCCATCTAGATCTTTTTCTTTAATAT
TCTGTAATAAAAACCAACTAGAACTTTTCTTTTAGACAAGAAAACACACGTTTCAGACTAGAGGTAGATCTAGAAAAAGAAATTATA

1615

PRKN

PRKN-206

ATATGAACATTTATTTTACAACAGTTTTAGTTTTACAGAAAAAGATGCAAAAATAGTACAGGGAGTTCCCATGTACCCACACCC
TATACTTGTAATAAAAATGTTGTCAAAATCAAAATGTCTTTTTCTACGTTTTTATCATGTCCCTCAAGGGTACATGGGGTGTGGG

1700

PRKN

PRKN-206

AGTTTCCCTATTTTAAACTTCTTACATTGTTATACTACATCTGTTATCATTAAATGAAAGAATGCTGATACATTCTTATTAACTAA
TCAAAGGGATAAAAATTTGAAGAATGTAACAATATGATGTAGACAATAGTAATTACTTTCTTACGACTATGTAAGAATAATTGATT

1785

PRKN

PRKN-206

AATTCAAACGTGATTTGGATATTCTTAGTTTTACCGAATGTCTCTTTTTCTTTTCCAGGATTCCATCCAGGCTACCACATTGCATT
TTAAGTTTGACATAAACCTATAAGAATCAAAATGGCTTACAGAGAAAAGAAAAGGTCCTAAGGTAGGTCCGATGGTGTAAACGTAA

1870

PRKN

PRKN-206

TACTCATCTCCTTAGGCCCTTAGACTCTAACAGTTTCTAAAGACTGTTCTTGTGTTTGGATGACCTTGAAAGGTTTGCAGTGTCT
ATGAGTAGAGGAATCCGGGAATCTGAGATTGTCAAAGATTTCTGACAAGAACAACCTACTGGAACCTTTCAAACGCGTCACGA

1955

PRKN

PRKN-206

GGCCAGGTGTTTTTACAACGTCCCTCAATTGCGTTTTGTGCGATGTTTTCGTGAAGATTAGACTGGGCTTATGTGTTTTTGGAGA
CCGGTCCACAAAAAATGTTGCAGGGAGTTAACGCAAAACACGCTACAAAAGCACTTCTAATCTGACCCGAATACACAAAAACTCT

2040

PRKN

PRKN-206

GAAAGCCACAGAGATAAATTGCCATTGCATCACACTGTGTCAAGGGTAAACATGATCAAGATGACTTACCACTGTTGATGTTG
CTTTCCGGTGTCTCTATTTAACGGGTAACGTAGTGTGACACAGTTCCCATTTGTAAGTGTCTACTGAAATGGTGACAACATAAC

2125

PRKN

PRKN-206

ACCTTGATCACCTGGCTGCGGTAGCGCCTGTCAGGTTTCTCCACTGTGAGGTTGTTTTGTTCCCTTTCCATGCTGTATTCTTC
TGGAAGTGTGACCGACGCCATCGCGGACAGTCCAAAGAGGTGACACTCCAACAAAAACAAGGGGAAAGGTACGACATAAGAAG

2210

PRKN

PRKN-206

AGGAGGAAGACAATCACAGGGGTGTTACAATCATAGGGGCGTTTACATTCACAGGGGGATTACAATCACAGGGGCGTTTACATTC
TCCTCCTTCTGTTAGTGTCCCCACAATGTTAGTATCCCCGCAAATGTAAGTGTCCCCCTAATGTTAGTGTCCCCGCAAATGTAAG

2295

PRKN

PRKN-206

ACAGGGGGATTACAATCACAGGGGCGTTTACATTCACGGGCGTTTACATTCACAGGGGTGTTACACTCAAAGGGGGCATTACAGT
TGTCCCCCTAATGTTAGTGTCCCCGCAAATGTAAGTGTCCCGCAAGTATAAGTGTCCCCACAATGTGAGTTTCCCCGTAATGTCA

2380

PRKN

PRKN-206

CATAGGGGCGTTTACATTCACAGGGGATTTACTGTACAGGGGCATTATACTTCACCTCCTTGAGCACATCCTTCCTTTAGCTGA
GTATCCCCGCAAATGTAAGTGTCCCCCTAAATGACAGTGTCCCCGTAATATGAAGTGGAGGAACTCGTGTAGGAAGGAAATCGACT

2465

PRKN

PRKN-206

GCAACTTTGAGTCTGATAACGCACCTTCATCATTACAGGGGTTAGCCAGAGACGTGGATAGATAGAAATTTGGGTTTCTCTTTCTG
CGTTGAAACTCAGACTATTGCGTGGAAGTAGTAAGTCCCCAATCGGTCTCTGCACCTATCTATCTTTAAACCCAAAGAGAAAGAC

2550

PRKN

PRKN-206

ACTCATTCTTCTGCTCTCCTCGGAGGCAGGTGTCCCAGTCTTGGTGTGTTTGGCTTCTTCAGCCAGAAAACTGTGGCTTTGCA
TGAGTAAAAGAAGACACAGAGGAGCCTCCGTCCACAGGGTCAGAACCACAAAAACGAAGAAGTCGGTCTTTTTGACACCGAAACGT

2635

PRKN

PRKN-206

ACCAAAGTGCCTGCTGGCCACATGCCATGTGCACGGACTGCACCTGGCTTCAAGCCTAAAGCTGTGAGAATGGGCACTCCCTTT
TGGTTTACGGACGACCGGGTGTACGGTACACGTGCCTGACGTGGACCGAAGTTCGGATTTTCGACACTCTTACCCGTGAGGGAAA

2720

PRKN

PRKN-206

ACGTAACGTACTTCTCCTGATGTGGACCCCTAACTAGAAATCTTCATTTTTTTTGTTCACTCTTCTATGGCTTTTTCAAGAATC
TGCATTGACATGAAGAGGACTACACCTGGGGGATTGATCTTTAGAAGTAAAAAAAACAAGTGAGAAGATACCGAAAAGTTCTTAG

2805

PRKN

PRKN-206

TGCTTTCTTTAGTGAAGTCCCAATTTTATAGTAGTTTTTTTGCAGGAGGGTTGATCCGATAGCATTTAATAATTCATTATAAAAAG
ACGAAAGAAATCACTTCAGGGTTAAAAATATCATCAAAAAACGTCCTCCCAACTAGGCTATCGTAAATTATTAAGTAATATTTTC

2890

PRKN

PRKN-206

GCAAAAAATCCTGGCCTCTATGTATAAGTGGGGAGATGAAATGAGGCTTCTGTACAAAAGATCTTCAAAGACAGAAATAAAGAAT
CGTTTTTAGGACCGGAGATACATATTCACCCCTCTACTTTACTCCGAAGGACAGTGTTTTCTAGAAGTTTTCTGTCTTTATTTCTTA

2975

PRKN

PRKN-206

TATGAAACAAGCTACTAGAGGATGGTATCATAACAGCATATACTCAAGTGCTAAATGAGTATGCAGGTAATAGTTATAAAAAATAA
ATACTTTGTTTCGATGATCTCCTACCATAGTATGTCGTATATGAGTTACAGATTTACTCATACTGTCATTATCAATATTTTTATTT

3060

PRKN

PRKN-206

AATAA
TTATTT

3145

PRKN

PRKN-206

AGATCCTTATAACAACCCAATGAAGATGAAATTGCACATGCAAGGTCACCTTAACATTGAGCTATGAGTCCAAAAGATGCAGTTCTA
TCTAGGAATATTGTTGGGTTACTTCTACTTTAACGTGTACGTTCCAGTGAATTGTAACCTCGATACTCAGGTTTCTACGTCAAGAT

3230

PRKN

PRKN-206

GAGATTTGTGTTCCACCACAAATTATTGGGTAGGGAAATAGATTGCTGTAGATGAGATTAGGTTAGAAATGAAGGACTACCGTTA
CTCTAAACACAAGGTGGTGTTTAATAACCCATCCCTTTATCTAACGACATCTACTCTAATCCAATCTTTACTTCTGATGGCAAT

3315

PRKN

PRKN-206

ACAAAATTTATTGATGGATCAAAGAGGGTAGGAATAAGGCAAAGCACTAAGACAGGTGTAGGAAGAGAATGTTTATTTTATTTAT
TGTTTTAAATAACTACCTAGTTTCTCCCATCCTTATTCCGTTTTCGTGATTCTGTCCACATCCTTCTCTTACAAATAAATAAATA

3400

PRKN

PRKN-206

ATGGAGACCAGGGTGATAAGAAATTTCTCAATGAAAATTTCTATATAGAAAAATGGGGTAGTAATCGCAGGAGGGTGTGAGGACAG
TACCTCTGGTCCCACACTATTCTTTAAGAGTTACTTTTTAAAGATATATCTTTTTACCCCATCATTAGCGTCTCTCCACACTCTGTCT

4335

PRKN

PRKN-206

GTTGGTTGGTTTGCTAAAGTTAGGGAATACTAGATTTAGTGATAGTTCTCAAAGGTGCAGAAGAACTTCCCAGGCAAGGGACAT
CAACCAACCAAACGATTTCAATCCCTTATGATCTAAATCACTATCAAGAGTTTCCACGTCTTCTTTGAAGGGTCCGTTCCCTGTA

4420

PRKN

PRKN-206

TTGGAACATGTGGAGTTACTTTTTGTGTTGCCGCAATTAACCGGGGCGTGCCTCTGATACTTACTGGGCTGCAGGTGGAGCCGAA
AACCTTTGTACACCTCAATGAAAACACAACGGCGTTAATTGGCCCCGCACGGAGACTATGAATGACCCGACGTCCACCTCGGCTT

4505

PRKN

PRKN-206

CATCCACGGAGCTTAGGAAACCCTCTCATGAGGAAGAATTGCCTGCCTTCAGTGCCTGAGTCCATTTTTGTGCTCATGTTAAT
GTAGGGTGCCTCGAATCCTTTGGGAGAGTACTCCTTCTTAACGGACGGAAGTCACGTGACTCAGGTAAAAACACGAGTACAATTA

4590

PRKN

PRKN-206

GGTCTATCTTGGGCTGTGATTTTTCTTTGGGTCTCTCAGCAAAACTGTCTGAGGCATCACATGATGTTATTTGCCATCTAAAAGGA
CCAGATAGAACCCGACACTAAAAGAAACCAGAGAGTCGTTTTGACAGACTCCGTAGTGTACTACAATAAACGGTAGATTTTTCT

4675

PRKN

PRKN-206

CTTCACCGAACCTTTGACAGTTCTGGATATGACTTTGATTAGTCCACCTTATGTCACCTGTATTCTGCAGAATCAATCACTGGAA
GAAGTGGCTTGGAAAAGTGTCAAGACCTATACTGAAAATAATCAGGTGGAATACAGTGGACATAAGACGTCTTAGTTAGTGACCTT

4760

PRKN

PRKN-206

CAAGGGGAGTGCCAGGCACAGATTGGCTTGCATCATCCCTGAACCAATCATTTGACCAATGACAAGGAGGATGGGGCTGTGCTGA
GTTCCCTCACGGTCCGTGTCTAACCGAACGTAGTAGGGACTTGGTTAGTAAACTGGTTACTGTTCTCTCTACCCGACACGACT

4845

PRKN

PRKN-206

TGAATGACATTGCTCTTCTCAGTGCAGGAGGCGGAATGGCTGCTTGAGGAGCAGCCAGAATCATTTAAGAATCATTAATTATTGA
ACTTACTGTAACGAGAAGAGTCACGTCTCCTCCGCCTTACCGACGAACTCCTCGTCCGGTCTTAGTAAATCTTAGTAATTAATAACT

4930

PRKN

PRKN-206

TATTGACTACTATATTTATGAAGTTTATACCCTGGTCAGACTTGGTAAATAAAAATTGTCTTAAAAGAAATATAAGGGCCCATCCA
ATAACTGATGATATAAATACTTCAAATATGGGACCAGTCTGAACCATTTATTTTAAACAGAATTTTTCTTTATATTTCCCGGGTAGGT

5015

PRKN

PRKN-206

CCAATAACCCCTTTCCCTCTTCCACCCATTCACTTCTTACTCTCTGGGACTTCTCAACCCTGGTTAGGGATATCATAAAAAAG
GGTTATTGGGAAAAGGGGAGAAGGGTGGGTAAGTGAAGGAATGAGAGACCCTGAAGAGTTGGGACCAATCCCTATAGTATTTTTTC

5100

PRKN

PRKN-206

GAATCTGGATATATCTCATTATGTTTTTTGTTATCAGTGCATTATGATGTTGATTGATAATACACATGATTGATAATGTTTACTG
CTTAGACCTATATAGAGTAATACAAAAACAATAGTACAGTAATACTACAACCTAACTATTATGTGTACTAACTATTACAAATGAC

5185

PRKN

PRKN-206

GTATGTTGTTTGTCTGATACTATATTATACGTCATCAAAACAATTATTAAAACAATGCATTTCCAAGCTTTTCATATGTAATT
CATACAACAAACAAAGACTATGATATAATATGCAGTAGTTTTGTTAATAATTTTGTACGTAAAGGTTTCGAAAAGTATACATTAA

5270

PRKN

PRKN-206

AAACCTTAGAAAGTAGAGGTGAGCCATATTCTCTATCATATCTCTTGGTCTCTGGAAGTTTTCTGTCCACCAAGAGGAGCAGAAT
TTTGAATCTTTCATCTCCACTCGGTATAAGAGATAGTATAGAGAACCAGAGACCTTCAAAGACAGGTGGTTCTCCTCGTCTTA

5355

PRKN

PRKN-206

CCAGAAAAATTGGCTACTTTATTTAGTATTTACCCACATCCTATCTAATCTCCCTTAGTTACCATGCAAGCAAAGGACACTGCTT
GGTCTTTTTAACCGATGAAATAAATCATAAATGGGTGTAGGATAGATTAGAGGGAATCAATGGTACGTTTCGTTTCCTGTGACGAA

5440

PRKN

PRKN-206

TCATTAGCTCTACCTCCTCTAGGTGCCTAGAATAGGGAACCTATTTTTGGAGCACACACTTGCCAGCACTAGGAGGATAGGCCCT
AGTAATCGAGATGGAGGAGATCCACGGATCTTATCCCTTGATAAAAACCTCGTGTGTGAACGGGTCGTGATCCTCCTATCCGGGA

5525

PRKN

PRKN-206

GTACTAGTCTCTTTCTGAGATTTTCTAATACATCCATAATCTCAATAAATCTTGTGTAACAGACATTGGTGTTCATCCCTTATA
CATGATCAGAGAAAGACTCTAAAAGATTATGTAGGTATTAGAGTTATTTAGAACACATTGTCTGTAACCACAACGTAGGGAATAT

5610

PRKN

PRKN-206

CCGATTTATTAGATCAGGAAGCTAACAGTCAAGGTGGCCAGGTAACCTTGTCAAAAATTAGCAAGCGTTACAACCAGCATTCAA
GGCTAAATAATCTAGTCCTTCGATTGTCAGTTCACCGGTCCATTGAACAGTATTTAATCGTTTCGCAATGTTGGTCGTAAGTTT

5695

PRKN

PRKN-206

TTTCTCTTTATGTAGCTCTAAAGACGTTCTGCCTTCTGTGACTTTAAAGAGGTAGTAGGTGGGGAGAAGTGGGTACTTCTTTCCA
AAAGAGAAATACATCGAGATTTCTGCAAGACGGAAGACACTGAAATTTCTCCATCATCCACCCCTCTTGACCCATGAAGGAAGGT

5780

PRKN

PRKN-206

CTCCTGTTTTGGAAATCATGGCTGGAGTTCAGGGGCTGGTACAGATGGGACATGACATGTTTCCCACATATGTCAGAAAAAGGTT
GAGGACAAAACCTTTAGTACCGACCTCAAGTCCCCGACCATGTCTACCCTGTACTGTACAAAGGGTGTATACAGTCTTTTTTCAA

5865

PRKN

PRKN-206

GAGACCCACTCAAATCACATTACTGCCATTGAGCACTAGCCATTTTTACATAATGGCACTTGATTATGAACTCAGTGAGTTTTCT
CTCTGGGTGAGTTTAGTGAATGACGGTAAGTCGTGATCGGTAAAAAGTGTATTACCGTGAACCTAATACTTGAGTCACTCAAAGA

5950

PRKN

PRKN-206

TAAGATGTTTTTTCTTATTCATGCGAATGTTTTAGTTGGTCAAATATTATGATTTTGGTTTTATCTTTCCATTTTAAATTTATATT
ATTCTACAAAAAAGAATAAGTACGCTTACAAAATCAACCAGTTTATAATACATAAAACCAAATAGAAAAGGTAAAATTTAAATATAA

6035

PRKN

PRKN-206

GTATGTTAGATTTACTGTTAAAAATATTCATATCCGTAGTATTTATGATTTATCTAAATACTGTAACCTTTAAATCTGTAACCTTTT
CATACAATCTAAATGACAATTTTTATAAGTATAGGCATCATAAATACTAAATAGATTTATGACATTGAAATTTAGACATTGAAAA

6120

PRKN

PRKN-206

CTATTATAGAAAAAAGTTGTATATACTTAGGATTTTCAGTAGTTGGACAGAGGTATCTTTAATATTTTTTGCAGTTTCCCTTTACA
GATAATATCTTTTTTGAACATATATGAATCCTAAAGTCATCAACCTGTCTCCATAGAAATTATAAAAAACGTCAAAGGGAAATGT

6205

PRKN

PRKN-206

AAAAAACTCTCATCCTTGCAGTAGGAGTTCCATGATTTGAACCCCTGGAGCAAAAATCATAAACTTAGGATCTCCTGGAATTTTTTA
TTTTTTGAGAGTAGGAACGTCATCCTCAAGGTACTAAACTTGGGGACCTCGTTTTAGTATTTGAATCCTAGAGGACCTTAAAAAT

6290

PRKN

PRKN-206

TCTGGTTTTATAGCAGCTTTGGCACAAAATTCAGCCACTTCTTCCACATTCCTTCCATGGTGTCTTTACTTTAAATCTATTCTC
AGACCAAAAATATCGTCGAAACCGTGTTAAGGTCGGTGAAGAAGGGTGTAAGGAAGGATACCACAAAATGAAATTTAGATAAGAG

6375

PRKN

PRKN-206

ACTAGTAGAAAATGAAATTTAGAACTGGGGTCATATCTTTTGTCCCTATAGCCCTAACTTGTGCATGTGTCTTTTTCTGATGAATT
TGATCATCTTTTACTTTAAATCTTGACCCAGTATAGAAAACAGGGATATCGGGGATTGAACAGTACACAGAAAAGACTACTTAA

6460

PRKN

PRKN-206

GGTTGTCTTATGGTCTCTGATCTGAGGATGCTGTGAAGATACCTCAGGGCTTCCAATACATTTTTATTTCTTCCCCTCTATTTTC
CCAACAGAATACCAGAGACTAGACTCCTACGACACTTCTATGGAGTCCCGAAGGTTATGTA AAAATAAAGAAGGGGAGATAAAAAG

6545

PRKN

PRKN-206

AAAGGCGTCAAATGAAATTTGACTTAAAAGTGATCAAAAAGCACCTTTTCCCTCCGTAATTAGTATTTTTTTCATGAATTTTCTTTATT
TTTCCGCAGTTTACTTTAACTGAATTTTACATAGTTTTTCGTGAAAAGGAGGCATTAATCATAAAAAGTACTTAAAAGAAATAA

6630

PRKN

PRKN-206

TGGAGCACTTTGTCAGTGGTCGTCCTTCTTTTTCTAAACACTTTCCGTGCTGGTCAGAGATGTCAGGCCTTTGTTCTTGTGGTG
ACCTCGTGAAACAGTGACCAGCAGGAAGGAAAAAGATTTGTGAAAAGGCACGACCAGTCTCTACAGTCCGGAAAACAAGAACCAC

6715

PRKN

PRKN-206

CCATCTGGACCACCTGCCCTCACTGGAGTGTACAGTCTGTTTTGGGGCCCATGTTGTTTCATGGTTATTGTTTCACGGTCTTTTGT
GGTAGACCTGGTGGACGGGAGTGACCTCACAGTGCAGACAAAACCCGGGTACAACAAGTACCAATAACAAGTGCCAGGAAACGA

6800

PRKN

PRKN-206

TTAAAGAAGGCCAAAATGTATATCAAAAACAGCTAAATGTCCATTATTTTTTAAATGTTACAAGACGATAGTTTTAAATACTATAAA
AATTTCTTCCGTTTTACATATAGTTTTTGTGCGATTTACAGGTAATAAAAAATTTACAATGTTCTGCTATCAAAAATTTATGATATTT

7735

PRKN

PRKN-206

TATTATTTAATGAACCGAATAATATGGTCTGTGGTTTTATTTATGTTTTCAAGATAAGGGAACTGAGACCTAAAGAGGGAGGTTAA
ATAATAAATTACTTGGCTTATTATACCAGACACCAAATAAATACAAAAGTTCTATTCCCTTGACTCTGGATTTCTCCCTCCAATT

7820

PRKN

PRKN-206

TAGATTGACCCCTAGCATCCTAAGCCAATTAAGGAGTCTGTGGGGATTTTTTCATAGGTCTTCCTAATGCTTCAGGATGTTCTTT
ATCTAACTGGGGATCGTAGGATTCGGTTAATTTCTCAGACACCCCTAAAAAGTATCCAGAAGGATTACGAAGTCCTACAAGAAA

7905

PRKN

PRKN-206

TAACCCGTGTGCTATCCTGCTTCCATGAGGAATGTGGTGAATATTAAGACATATATAGTAAATGCCACTGGTGCCTGAATAA
ATTGGGCACACGATAGGACGAAGGTACTCCTTACCACTTATAATTTTCTGTATATATCATTTACGGTGACCACGGGACTTATT

7990

PRKN

PRKN-206

GGAAGATCAGGCTTTTGCAGTAGCTGATAGCCAGAAGCTTCTTGGGGGAGGTCACATTTGAAGTGGGCCATGGAGGTAGGCAGGA
CCTTCTAGTCCGAAAACGTCATCGACTATCGGTCTTGAAGAACCCCTCCAGTGTAACCTTACCCGGTACCTCCATCCGTCCT

8075

PRKN

PRKN-206

TTTCAATAGGAAGAGGAGAAGGAGGGAGGTCATGAATAAAGCAAGAAGTTGTGTGCAGCAGTTTTTTGTGATTTTTTTTTTCT
AAAGTTATCCTTCTCCTCCTCCCTCCAGTACTTATTTTCGTTCTTCAACACACGTCGTCAAAAAACACTAAAAAAAAAAGA

8160

PRKN

PRKN-206

GGGAGCATTTAGTTTTAAAGAGTACACATGGAGATTAATGAAGAAAATGCTGGAATGTAGGTTTGTGCTAGATGAAAGGGATCTT
CCCTCGTAAATCAAATTTTCTCATGTGTACCTCTAATTACTTCTTTACGACCTTACATCCAAACACGATCTACTTTCCCTAGAA

8245

PRKN

PRKN-206

GGAGTCTTTCTCACCAGCCGACAGTGTGAGACTTAAAGGATTTGAGTGGTGTGACATAGCTCTGTATTAATAAGGCTCATTTTG
CCTCAGAAAGGAGTGGTCGGCTGTACACTCTGAATTTCTTAACTCACCACACTGTATCGAGACATAATTATTCCGAGTAAAC

8330

PRKN

PRKN-206

CAGAACTATGTAGGGCCTTTTGGAGGTGATGGCGTGGATCAAGACTCCAGTTGGGGGCTATTATGAGACTCTAGAAAAGATGTGA
GTCTTGATACATCCCGGAAAACCTCCACTACCGCACCTAGTTCTGAGGTCAACCCCGATAATACTCTGAGATCTTTTCTACT

8415

PRKN

PRKN-206

TGAGAGCGTGACTTCAAGCAGTGAGAGAAAGAATGGAAAGTAAAGGGCAGTGAGAGACGCTGAAGAGGTGGGACAGCAGGTGCAG
ACTCTCGCACTGAAAGTTCGTCACTCTCTTTCTTACCTTTTCAATTTCCCGTCACTCTCTGCGACTTCTCCACCCTGTCTCCACGTC

8500

PRKN

PRKN-206

TGAGAAGACGGCATGCAGACAGACAGACTAGAGGATGCAGCCTGGGTCTCACGGGGAACAGTGGCTTCAATAAGACAAATGGTGT
ACTCTTCTGCCGTACGTCTGTCTGTCTGATCTCCTACGTGCGACCCAGAGTGCCCTTGTACCCGAAGTTATTCTGTTTACCACA

8585

PRKN

PRKN-206

CACTAGTGTCTCCACCCCCTCCCTGCCAAAAAGAGGGCAAATAATTGTCTTCATAGACCCAGTGGAGCATTGTTGGCCAGGACCAC
GTGATCACAGAGGTGGGGGAGGGACGGTTTTTCTCCGTTTATTAACAGAAGTATCTGGGTACCTCGTAAAAACGGTCTCGGTG

8670

PRKN

PRKN-206

CCAAGTCTAGGGCTCTGAGCCATAGCCCCGAGTGGGTCTTCACTCTGGTCTATAGAGCAGCTTAGATTTTTTTCCATTGCTATAC
GGTTCAGATCCCGAGACTCGGTATCGGGGCTCACCCAGAAGTGAGACCAGATATCTCGTCAATCTAAAAAAGGTAACGATATG

8755

PRKN

PRKN-206

PCR Forward

TTTATTAAGAGGGTCACTGTGGAGG

CTTGAGTGCTAACACATCGCCTCCTATTTTTATTAAGAGGGTCACTGTGGAGGGAGTGTGAGTGTGTACATGCTGTGAGAGCTGA
GAACTCACGATTGTGTAGCGGAGGATAAAAAATAATTCTCCAGTGACACCTCCCTCACACTCACACATGTACGACAGTCTCGACT

8840

PRKN

PRKN-206

GTCTTTTCAATAAACTCATGGGACTCTTTCAATTCCAATCAAGCAAGTGTCTGCTCAAGTCTCTCTGTTTCCAGGATGGATGT
CAGAAAAGTTATTTGAGTACCCTGAGAAAAGTTAAGGTTAGTTTCGTTTACAGGACGAGTTCAGAGAGACAAAAGGGTCTACCTACA

8925

PRKN

PRKN-206

CAAAGGGAGAATGCAATTTTTGGTTTTGCAGGTCACTGACGAATATATGAAAGGGAAATCTCGTGGGTAACCTAACTCTGTTTTTCCC
GTTTCCCTCTTACGTTAAAAACCAAACGTCCAGTGACTGCTTATATACTTTCCCTTTAGAGCACCCATTGATTGAGACAAAAAGGG

9010

PRKN

PRKN-206

AAATATTGCTCTATAGCATTAAAGTTTTTTGTTGTAAGTGAAAGAAAATATATACCATTCACTGAAGGGCTGCGAGGGGTAAATCG
TTTATAACGAGATATCGTAATTCAAAAACAACATTCACCTTTCTTTTATATATGGTAAGTGACTTCCCGACGCTCCCCATTTAGC

9095

PRKN

PRKN-206

GTTGAGAAAATGTTGCTATCACCATTTAAGGGCTTCGAGTGATGCTCACTTTCTCTTCTCCCTTCCAATTTCCCTGGTCAAGTGT
CAACTCTTTACAACGATAGTGGTAAATTCGGAAGCTCACTACGAGTGAAAGAGAAGAGGGAAGGTTAAAGGAACCAAGTCACAAA

9180

PRKN

PRKN-206

F
ENSE...
PRKN-206

Donor Template WT -> SNV

GACACCAGCATCTTCCAGCTCAAGGAGGTGGTTGCTAAGC

GTCAGGTTCAACTCCAGCCATGGTTTCCAGTGGAGGTCGATTCTGACACCAGCATCTTCCAGCTCAAGGAGGTGGTTGCTAAGC
CAGTCCAAGTTGAGGTCGGTACCAAAGGGTACCTCCAGCTAAGACTGTGGTCGTAGAAGGTCGAGTTCTCCACCAACGATTTCG

9265

PRKN

PRKN-206

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

ENSE00003536181

PRKN-206

Donor Sequence WT -> SNV

Donor Template WT -> SNV

GACAGGGGGTTCCGGCTGACCAGTTGC TGTGATTTTCGCAG6GAAGGAGCTGAGGAATG

GACAGGGGGTTCCGGCTGACCAGTTGC TGTGATTTTCGCAG6GAAGGAGCTGAGGAATGACTGGACTGTGCAGGTGAGTCTCCC
CTGTCCCCCAAGGCCGACTGGTCAACGCACACTAAAAGCGTCCCTTCTCGACTCCTTACTGACCTGACACGTCCACTCAGAGGG

9350

PRKN

PRKN-206

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

ENSE00003536181

PRKN-206

Donor Sequence WT -> SNV

gRNA Protospacer Sequence
PAM

SNV

CAACGCACACTAAAAGCGTC
gRNA Protospacer

TTGGCGGCCGTTCTTGGGATGCCGCCAGCTCCATTGCTCATGCCGCTGCGCTGCCAATCTGACATTCATGCCTGAGATCTAATA
AACCGCCGGCAAGAACCCTACGGCGGTCGAGGTAACGAGTACGGCGGACGCGACGGTTAGACTGTAAGTACGGACTCTAGATTAT

9435

PRKN

PRKN-206

W R P F L G C R Q L H C S C R L R C Q S D I H A *
(in frame with PRKN-206)

GAATAAATAGTGCCTGGGGATTCTTGAACCTTACTCCACACTGCTTCATTAATTCTGACCTTCTTAATTATGCATTAACACAGC
CTTATTTATCACGGACCCCTAAGGAACCTTGAATGAGGTGTGACGAAGTAATTAAGACTGGAAGAATTAATACGTAATTTTGTTCG

9520

PRKN

PRKN-206

CGTAATTTTGTCC

Sanger Sequencing Primer

AAGCAGGAAAGATTGGAAGAACAACCTGCGAGTGAGAAAGAGAGAGAAAGAACACACGAGCTAGGCTTAGTGAATAAATGTCTA
TTCGTCTTTCTAACCTTCTTGTGACGCTCACTCTTTCTCTCTCTTTCTTGTGTGCTCGATCCGAATCACTTATTTACAGAT

9605

PRKN

PRKN-206

TTCGTCC

Sanger Sequencing Primer

CTGACTACAGGAGCAGCAAGGCACAATTTCTGTGTCTGTTCAATTTCTACCTTACTTATTCCATTTGAATCTTAACGAAGAAGGA
GACTGATGTCTCTCGTTCGTTCCGTGTTAAAGACACAGACAAGTTAAAGATGGAATGAATAAGGTAAACTTAGAATTGCTTCTTCTCT

9690

PRKN

PRKN-206

TTCGAATAAATTGTTCCCAATCAGGCTGCTCAGTCCCTGCACTGTGAGGAATTTGTAACCCAATTGTGACCCCTGGAGGTTAGTG
AAGCTTATTTAACAAGGGTTAGTCCGACGAGTCAGGGACGTGACACTCCTTAAACATTGGGTAAACACTGGGGACCTCCAATCAC

9775

PRKN

PRKN-206

CCTTAAACATTGGGTAAACACTGGG
PCR Reverse

AGGGCTGCTGCTATGCTGCGCTAGAGGAGGTGTGGGCTCCGGGGCCCATTTGGCAACTAGCTTTGGGCACTCCTTGGCCAGGACCA
TCCCGACGACGATACGACGCGATCTCCTCCACACCCGAGGCCCGGGTAACCGTTGATCGAAACCCGTGAGGAACCGGTCTCTGGT

9860

PRKN

PRKN-206

GAATCGCACAGTTCTGCAGCTGATGGGGAAGGAAGCCTGGAGCACAAACAACAGTATACCTTTGCATGAATTTCTCCAAGGTTTCAG
CTTAGCGTGTCAAGACGTCGACTACCCCTTCTTTCGGACCTCGTGTGTTGTTGTCATATGGAAACGTACTTAAAGAGGTTCCAAGTC

9945

PRKN

PRKN-206

TAAACATTGTCCCTGGAAATAGGCCCTGCAACGTAATAAGTGTGAACGATGCTCTCTTCTCTCCTGGCCCCAGCAGAGCTTCTGG
ATTGTAACAGGGACCTTTATCCGGGGACGTTGCATTATTCACACTTGCTACGAGAGAAGAGAGGACCGGGGTCGTCTCGAAGACC

10,030

PRKN

PRKN-206

CAGCCCACTGCTCCTAGCCCCATGAAAGCCCTACACACATGTCATTCCGGATTGGTGATTTTTGTAGGAATTAGGGGGACTGGTGA
GTCGGGTGACGAGGATCGGGGTACTTTCCGGGATGTGTGTACAGTAAGCCTAACCCTAAAAACATCCTTAATCCCCCTGACCACT

10,115

PRKN

PRKN-206

GGTGACTGATAATACCACCATCACCTAGAAGTAGAGACCCGTCCTTTGTTGGGGAAACTCGCAAATACAACCTCAACATTTGTTGA
CCACTGACTATTATGGTGGTAGTGGATCTTGATCTCTGGGCAGGAAACAACCCCTTTGAGCGTTTATGTTGAGTTGTAAACAACCT

10,200

PRKN

PRKN-206

CGCTATTCTTTGTGAATGCAAGAAAGACGAAACGCTTTCTGGGAATGGTCCCTGTGACTGTGAAGGACCCTGCAGATGTATGTTT
GCGATAAGAAACACTTACGTTCTTTCTGCTTTGCGAAAGACCCCTTACCAGGGACACTGACACTTCTGGGACGTCTACATACAAG

10,285

PRKN

PRKN-206

CCCTTTTCTTAACCAGCATCAATTAATTGCACTCAGGTTTACAGCTGTGTGGGTATCACTGCTCCGCGCAGGGGGGCTCCTGGGT
GGGAAAAGAATTGGTTCGTAGTTAATTAACGTGAGTCCAAATGTCGACACACCCATAGTGACGAGGCGCGTCCCCCGAGGACCCA

10,370

PRKN

PRKN-206

CAGAGTACACAAAGTCCGTCTTGTATCTGCATCCTTTCCCTGTCTCTTGTGGGTAACGATATTTATGGCTTTGTA AAAATGCTCT
GTCTCATGTGTTTT CAGGCAGGAACATAGACGTAGGAAAAGGGACAGAGAACACCCATTGCTATAAAATACCGAAAACATTTTACGAGA

10,455

PRKN

PRKN-206

CAGAATTTGGGTATACAAAGAAGCTACAGAAATGCAAATTTGTTCTGTCAATTCTGCATTGCATCTCCTGCTGATGGTGTGAGGC
GTCTTAAACCCATATGTTTCTTCGATGTCTTTACGTTTAAACAAGGACAGTAAGACGTAACGTAGAGGACGACTACCACAACCTCCG

10,540

PRKN

PRKN-206

ACATACTCGTTGTGCACAAACTGCTGGCCTCTGCTTTTCAGGCAATTTGGTTTTATAAGGGAAGTGCATGTGCTAAAAAGGGTTTT
TGTATGAGCAACACGTGTTTGACGACCGGAGACGAAAAGTCCGTTAAACCAAAAATATTCCCTTCACGTACACGATTTTTCCCAAAA

10,625

PRKN

PRKN-206

GATTTTTTTTTTTTTCTATTTTCAGTCAACTAAAAAGATTTTCACTGTATCTGCCAACCTCTAAATCCAAGGATGTTTCTTTCACAA
CTAAAAAAAAAAAAAGATAAAGTCAGTTGATTTTTCTAAAAGTGACATAGACGGTTGGAGATTTAGGTTCTTACAAAAGGAAGTGTT

10,710

PRKN

PRKN-206

ATAAATAATTTTAAAAACAGCTCCTTGAATCAAAACATTTTATATTGCCAAAACCTTCAGGTTCTAAACTGCCATTTGTGCTGATT
TATTTATTAATAATTTTGTGCGAGGAACCTTAGTTTTGTA AAAATATAACGGTTTTTGGAAAGTCCAAGATTTGACGGTAAACACGACTAA

10,795

PRKN

PRKN-206

CATAAAACAATTAGCGATTTTCATATGTAGTTAGACTAATTGCTTCAGATGATTGACTTTGCAAACATATATGCCTAAGACATGTG
GTATTTTGTTAATCGCTAAAAGTATACATCAATCTGATTAACGAAGTCTACTAACTGAAACGTTTGTATATACGGATTCTGTACAC

10,880

PRKN

PRKN-206

TTGATTTATGAGTCTATTTT GACAAACACTTCTTAAGCACTTCCAATGTCCTAGGCTTCTCAGGGGATCCAAAAGAGAGACCTAA
AACTAAATACTCAGATAAAACTGTTTGTGAAGAATTCGTGAAGGTTACAGGATCCGAAGAGTCCCCTAGGTTTTCTCTCTGGATT

10,965

PRKN

PRKN-206

CTCAGCCCTGTTTTTCATGGAGACTGCTCTTTATTTATGAGCCCTAAAACCGAGAGAAAATATTAGATTGAACCATATGGGATTGC
GAGTCGGGGACAAAAGTACCTCTGACGAGAAAATAAATACTCGGGATTTTGGCTCTCTTTATAATCTAACTTGGTATACCCCTAACG

11,050

PRKN

PRKN-206

CATTTTTACAGGTTCAACAATTTTCATGTTGTTCAACCTAATAGCTATAATATAAGAATATGAAACATAACTGCCGTATCGCACCT
GTA AAAATGTCCAAGTTGTTAAAAGTACAACAAGTTGGATTATCGATATTATATTCTTATACTTTGTATTGACGGCATAGCGTGGA

11,135

PRKN

PRKN-206

GAAAATATTATGAAGTTTTTAAAGGTGGAGAAAACACATCTGGTTGGAAGTCACCAGGAAGAACTTCTTGGATGAATTGAGTTGAG
CTTTTATAATACTTCAAAAATTTCCACCTCTTTTGTGTAGACCAACCTTCAGTGGTCCTTCTTGAAGAACCTACTTAACTCAACTC

11,220

PRKN

PRKN-206

GTAGGATTCTGTAGATGGAGGAATAGGGGAATGAGCATAGAGAATGCTTGCCAAAAAGGATGGGTTCTTGTCTTCTAGAACCTG
CATCCTAAGACATCTACCTCCTTATCCCTTACTCGTATCTCTTACGAACGGTTTTTCTACCCAAGAACAAGAAGATCTTGGAC

11,305

PRKN

PRKN-206

AAGAGAGATGTTGAAGATTGGACAAAAATAAAATATGGGCTATATTTACATAACCTTGACTAACTTGGCATTGAAGTTTCATT
TTCTCTCTACAACCTCTAACCTGTTTTTATTTTATACCCGATATAAAGTGTATTGGAACCTGATTGAACCGTAACTTCAAAGTAA

11,390

PRKN

PRKN-206

GGTGGGGAAGTACTAGAGAAAAATGTCATGCCATAGAAGGAAATGGGAAGTCTGAAGACCCGGTTTTGGTTGGGGGAAGGATGCTGCAT
CCACCCCTTGATCTCTTTTTACAGTACGGTATCTTCTTTACCTTCAGACTTCTGGGCCAAACCAACCCCTTCTACGACGTA

11,475

PRKN

PRKN-206

TGTTCCAACATGATGGGAGTTGATGCCAGCTGAGTACGTGTGTTTTGGAGATGCCTAGCTGGCTGTTGAGAACTTGTGTCTGAGGA
ACAAGGTTGTAACCTCAACTACGGTCGACTCATGCACACAAACCTCTACGGATCGACCGACAACCTTGAACACAGACTCCT

11,560

PRKN

PRKN-206

CACTGAAAAAGAAAGGTTCACTATTATGGAACCTTCTATTAATCACAGTTAAATGATTTAGGTGCCGAGAAGTTGGCAAACCTTTG
GTGACTTTTTCTTTCCAAGTATGAATACCTTGAAGATAATTTAGTGTCAATTTACTAAATCCACGGCTCTTCAACCGTTTGAAC

11,645

PRKN

PRKN-206

TTCATAGAAGAGTTTCACTGTAAAGACTAGGAAGTTACACATGTAATTGCAAATTGATGGCTATGTTTTCTTTAAGTGTACAAC
AAGTATCTTCTCAAAGTGACATTTCTGATCCTTCAATGTGTACATTAACGTTTAACTACCGATACAAAAGAAATTCACATGTTGA

11,730

PRKN

PRKN-206

GGCAGAATTTTAGCATCCTAGATATTCTTGTATAATCTTAGAACATATGTTTACAACCTATTTAGTCAATATCATTTAGTTACCCA
CCGTCTTAAATCGTAGGATCTATAAGAACATATTAGAATCTTGTATACAAATGTTGATAAATCAGTTATAGTAAATCAATGGGT

11,815

PRKN

PRKN-206

TTATCATTACAGGTGCTATATTTACAGTATAAGCACAAAAATCTAATAATAAGTTGCTGCTGAGAAAAAGAAGATGGACCTTC
AATAGTAATGTCCACGATATAAAGTGTCAATTCGTGTTTTATAGATTATTATTCAACGACGACTCTTTTTCTTCTACCTGGAAG

11,900

PRKN

PRKN-206

CATATGAGCTACTTAATGCTTCCATTAATGAATGTTAAATATACACCTTGGTGTCTGAAGAGAAGAAGAGATGGCTGGGGTGGT
GTATACTCGATGAATTACGAAGGTAATTACTTACAATTTATATGTGGAACACAGGACTTCTCTTCTTCTTCTACCGACCCACCA

11,985

PRKN

PRKN-206

GTCTATGCTTGCTGGGTGTCTTCTCCTCGTTTTCGTATTCTTTATCATAGGTGATATGAACATATATATTAGCTTATCATGCAA
CAGATACGAACGACCCACAGAAGGAGGACCAAAGCATAAGAAATAGTATCCACTATACTTGTATATATAATCGAATAGTACGTTT

12,070

PRKN

PRKN-206

ATGAGATATTGTGAGTATAAAAAGAAGACCCCTGTCAATAATTATTCCAGGACAAAATTATATGTTGGGAGTGTCTTAGGAAAACCTG
TACTCTATAACACTCATATTTTCTTCTGGGACAGTTATTAATAAGGTCTGTTTTAAATATACAACCCCTCACAGGATCCTTTTTGAC

12,155

PRKN

PRKN-206

AGGCAATGGTCACCCACATACTGAGCAGTATCTCTCACACTTAGTTTCACCTTCTTTGAGGAGGAAATTAGTTTTAGTGCCTCA
TCCGTTACCAGTGGGGTGTATGACTCGTCATAGAGAGTGTGAATCAAAGTGGAAGAAAACCTCCTCCTTTAATCAAATCACGGAGT

12,240

PRKN

PRKN-206

CCTCAGGTACTTTGGGGAACATAGCTTGAGACCACAGTCTTATGAAATGTCATAATTTTAAAAAGCGAGTTTGTCTATTTAACT
GGAGTCCATGAAACCCCTTGATATCGAACTCTGGTGTGAGAATACTTTACAGTATTAAAATTTTTCGCTCAAACAGATAAATTGA

12,325

PRKN

PRKN-206

GGCAAAGGGTATTTGTAAGATTATAATAGAATTGATGTCACATCTAAAAATTTTTCATAGAATTTTCAGTTCTGGGAGAGCATAT
CCGTTTCCCATAAACATTCTAATATTATCTTAACTACAGTGTAGATTTTTTAAAAGTATCTTAAAAGTCAAGACCCCTCTCGTATA

12,410

PRKN

PRKN-206

CCACAGGCCACTTAGAGAAGCACTGTTAGAGTATAGTTATTTTTCATTACACACTCATCTGTTTCAGTTTTGTTATTGGCAAGACTT
GGTGTCCGGTGAATCTCTTCGTGACAATCTCATATCAATAAAAAGTAATGTGTGAGTAGACAAGTCAAAACAATAACCGTTCTGAA

12,495

PRKN

PRKN-206

TAAGAACTTTAAAAAATTAAGGAAAAATGGAAAAATATAGACATTGAAAACGAATGATCTGGCACAGATTTTGTCTTCTGGGAAG
ATTCTTGAAATTTTTTAATTTCTTTTACCTTTTTTATATCTGTAACTTTTGCTTACTAGACCGTGTCTAAAACGAAGACCCCTTC

12,580

PRKN

PRKN-206

CTGGAGTAGGCATACTTTTCCCTCTTCCCTCCCAGCAACTACACTAAAAAGCCTAGACATTGCATATTGTACAGTTGACTCGTGGA
GACCTCATCCGTATGAAAAGGGAGAAGGAGGGTCGTTGATGTGATTTTTTCGGATCTGTAACGTATAACATGTCAACTGAGCACCT

12,665

PRKN

PRKN-206

GTCATGGAGTTAGGGGTGCCAACCGCTATGTAGACAAAACCTCATGTATACTTTTATCTCCCCTCACACTTTACCAGTAGTCTGCT
CAGTACCTCAATCCCCACGGTTGGCGATACATCTGTTTTGAGTACATATGAAAATAGAGGGGAGTGTGAAATGGTCATCAGACGA

12,750

PRKN

PRKN-206

ATTGACGGGAAGCCTTACTGATACCATGAACAGTTGATTAATACATATTTTTCATATGTAATATGTAAGTGTACTGTATGCTTATAATAAA
TAACTGCCCTTCGGAATGACTATGGTACTTTGTCAACTAATTATGTATAAAAAGTATACATTATACATGACATACGAATATTATTT

12,835

PRKN

PRKN-206

AAAAC TAGAGAAAACATTAACAGCATTACAAAAGGAGAGAGGATACTTACTATTTCATTAAGTAGAAGTGGATCATCAAGATTTT
TTTTGATCTCTTTTGTAAATGTCGTAATGTTTTTCTCTCTCCTATGAATGATAAGTAATTCATCTTACCTAGTAGTTCTAAAA

12,920

PRKN

PRKN-206

CATTGTCTTTGTCTTCATGTTGAGTAGGCTAAAGAGGGAAGAGGGAAGAGGGGGAGTTAGTCTCACTGTCTCAGGGGTGGCAGAGGC
GTAACAGAAACAGAAGTACAACCTCATCCGATTTCTCCTTCTCCTTCTCCCCCTCAATCAGAGTGACAGAGTCCCCACCGTCTCCG

13,005

PRKN

PRKN-206

AGAAGAAAATCTGCATATAAATGGACCCATGCAGTTTTCAACCCATGTTATTCAAGGGTCCGCTGTACAAGCTTAGGAAGATTCTG
TCTTCTTTTAGACGTATATTTACCTGGGTACGTCAAAGTTGGGTACAATAAGTTCCCAGGCGACATGTTTCGAATCCTTCTAAGAC

13,090

PRKN

PRKN-206

AAAGTAGTGAGAAGAATGTGGACAGAGTAGGGATTTTAGAACCCAAGGAAGAATCCAGAGGTGAATTTCTTGAGTTTTCTTTTTG
TTTCATCACTCTTCTTACACCTGTCTCATCCCTAAAATCTTGGGTTCTTCTTAGGTCTCCACTTAAAGAACTCAAAAGAAAAAC

13,175

PRKN

PRKN-206

CTACGTTACCTCAGATGTGGAACCTGAAGAAGCTGGCAACCAGGAAATGTCAACATATATAGACAAAAAGAAAAGAGAAGAAAAA
GATGCAATGGAGTCTACACCTTGACTTCTTCGACCGTTGGTCTTTACAGTTGTATATATCTGTTTTTCTTTTCTTCTTTTTT

13,260

PRKN

PRKN-206

GAAGCAGAGAGGAAGGGAGGGGCAGAGAGAGAGAGAGAGAGAGAGAAGGGAGGGGTAAAGGAAGGGGGAAGGGGAAGGGAAAAAG
CTTCGTCTCTCCTTCCCTCCCCGTCTCTCTCTCTCTCTCTCTCTTCCCTCCCCATTTCTTCCCCCTTCCCTTCCCTTTTTT

13,345

PRKN

PRKN-206

GAAGAAAGGAAGGAAGGAAGAAATCCCAACAATGGCCTGTTTTTTATCCAGAGGACTCAGAAAGGGGCTGCCTAGCAACATAGA
CTTCTTTCCCTTCCCTTCTTTAGGGGTTGTTACCGGACAAAAAATAGGTCTCCTGAGTCTTTCCCGACGGATCGTTGTATCT

13,430

PRKN

PRKN-206

AAACATTTAGACAATAACCAGTCTACTCCAGCCAAATGCAACAGAAAACTGCGGCCCTATCCTTGTCACCAACACTAGTAA
TTTGTAATCTGTTATTGGTCAGATGAGGTCGGTTTACGTTGTCTTTTTGACGCCGGGATAGGAACAGGGGTGGTTGTGATCATT

13,515

PRKN

PRKN-206

AGGCTGAGTGGAGAGCCTCTTGTTTTGAAATTTCTGAAATAAAACACTCACTGATGGGTTTGACATAAGAATGGAAGGAACAGAGA
TCCGACTCACCTCTCGGAGAACAACCTTTAAAGACTTTATTTGTGAGTGACTACCAAACTGTATTCTTACCTTCTTGTCTCT

13,600

PRKN

PRKN-206

AAAGAGTCAGTGAACCTGGAAGTTGGAACATAGAAATGACACGGTCCAAATGGCAAAGAAAAGGTAGGCTGGAAAAAGAAAAAGG
TTTCTCAGTCACTTGACCTTCAACCTTGTATCTTTACTGTGCCAGGTTTACCGTTTCTTTTCCATCCGACCTTTTTTCTTTTTTCC

13,685

PRKN

PRKN-206

AATAGAGCCTCAGAGACCTGTGGTTCTCCAACAGAGCATTTAAAGTTTGTGTCAGGGGATTCTGGAAGGAGAAGATAATGGTGG
TTATCTCGGAGTCTCTGGACACCAAGAGGTTGTCTCGTAAATTTCAAACACAGTCCCCTAAGGACCTTCTTCTTATTACCACC

13,770

PRKN

PRKN-206

GCAAATGCTCAAAGAAATAAGTGTGGAACTTCCAAAGTTTGCAAGAGACATAAAGTTATAGATGGATTTATAAAGCTGAGTGA
CGTTTACGAGTTTCTTTATTACAAACCTTTGAAGGTTTCAAACGTTCTCTGTATTTCAATATCTACCTAAATATTTTCGACTCACT

13,855

PRKN

PRKN-206

ATCTAAACAGGAAAAACCCAAAGAAACCCACACCAACACACAACGTAATTCAACTTCTTAAACTAAAGACAAATTTTAGATCT
TAGATTTTGTCTTTTGGGTTTCTTTGGGTGTGGTGTGTGTTGCATTAAAGTTGAAGAATTTGATTTCTGTTTAAATCTAGA

13,940

PRKN

PRKN-206

TGAAAGAAGCCAGAGAAATATCACACCTTCCCTATAGGGCTAACATTGTTCTAATTACAGTGGATTTCTCATCAGAAACCATGAA
ACTTTCTTCGGTCTCTTTATAGTGTGGAAGGGATATCCCGATTGTAACAAGATTAATGTCACCTAAAGAGTAGTCTTTGGTACTT

14,025

PRKN

PRKN-206

GGCTAGAAGGAAGTGGCACAATGTTTTTCAAATGCTGAAAGAAAAGAACTGCCAACCTGTAATATTATACCCAGTGAAAATGTCTG
CCGATCTTCCTTCACCGTGTACAAAAAGTTTACGACTTTCTTTCTTGACGGTTGGACATTATAATATGGGTCACCTTTTACAGC

14,110

PRKN

PRKN-206

TTCAGGAAGAAAGAACAATCAATACTTTTTTTTTTAGATAAAGAAAACTAAGCGAATTTGTCACCAGCAGACCTACCCTAAAA
AAGTCTTCTTTCTTGTGTTAGTTATGAAAAAATAATCTATTTCTTTTGTATTGCTTAAACAGTGGTCTGCTGGATGGGATTTT

14,195

PRKN

PRKN-206

GAATGGCTAAAGAAATTTTCTAAACAAATGAAACAACAAAAAAGGAATTTTGGAACTAGGAAGGAGGGAAAAACATAGTAAG
CTTACCGATTTCTTTAAAAGATTTGTTACTTTGTTGTTTTTCTTAAAACCTTGTGATCCTTCCTCCCTTTTTGTATCATTC

14,280

PRKN

PRKN-206

CAAAAATATGGTTAAATACAATGCACTGTTTTTCTCCTCTTGAGTTTTCTAAATTATGTTAGAGGGTTGCAGCAAAAAGTTATAGC
GTTTTTATACCAATTTATGTTACGTGACAAAAAGAGGAGAACTCAAAGATTTAATACAATCTCCAACGTCGTTTTCAATATCG

14,365

PRKN

PRKN-206

ATTGTCTAATGTAGTTCTACATGTAGAAGAAACATTTAGGCAAAACATAAACACAGATGCAAGGAAAGGTAAGATTTCTAACTT
TAACAGATTACATCAAGATGTACATCTTCTTTGTAAGTCCGTTTGTATTTGTGTCTACGTTTCTTTCCATTCTAAAGATTTGAA

14,450

PRKN

PRKN-206

GACCTACAAAATAGCAACTGCAGTAGAGCATGACAAGTTAAGAATGTATAAAGAAATATCTAGAGTAATAGGTAAAGTAGGTAAA
CTGGATGTTTTATCGTTGACGTCATCTCGTACTGTTCAATTCTTACATATTTCTTTATAGATCTCATTATCCATTTTCATCCATTT

14,535

PRKN

PRKN-206

TTAAAATACAAAATAAAGACAACACCAAATGCTGGTGAGGATGTGGAGAAATTGGATTACTCGCAAATTGCTACTGGGAATATAA
AATTTTATGTTTTATTTCTGTTGTGGTTTACGACCACTCCTACACCTCTTTAACCTAATGAGCGTTTAAACGATGACCCTTATATT

14,620

PRKN

PRKN-206

AATGGGTAGAACCCTCTGGAAAAAGAATATAGCAGTTTTCAAAAAAATGACATATGTATTTACCAGATGACAGAGTTATACTCTTA
TTACCATCTTGGTGAGACCTTTTCTTATATCGTCAAAGTATTTTTTACTGTATACATAAATGGTCTACTGTCTCAATATGAGAAT

14,705

PRKN

PRKN-206

GTTATTTATCCTAGAGAAATGAAGACGTAGGTACACACACAAATCTGTATATGAATGTTTATAGCAGTTTTATTACATTAGCAG
CAATAAATAGGATCTCTTTACTTCTGCATCCATGTGTGTGTTTAGACATATACTTACAAATATCGTCAAAAATAAGTGTAATCGTC

14,790

PRKN

PRKN-206

AACACGGAAACAACCTCTGATGTCTTTTCAGTGGATCTGTGGTTCAACAAACTGGTACCTCCACACCCTAGAATATTACTCAGCAGT
TTGTGCCTTTGTTGAGACTACAGAAAGTCACCTAGACACCAAGTTGTTTGACCATGGAGGTGTGGGATCTTATAATGAGTCGTCA

14,875

PRKN

PRKN-206

AAAAAAGGAGCCGACTGTTGATATACAAAATATCTTGGATGGATCTCAGGGGAAATGTGCTGTGTGGAAAAAGCCCATCCCCAAA
TTTTTTCCTCGGCTGACAACCTATATGTTTTATAGAACCTACCTAGAGTCCCCTTTACACGACACACCTTTTTTCGGGTAGGGGTTT

14,960

PRKN

PRKN-206

GATCGTACTGAATAATTTTATTTATATAACATTCTCAAAACGACAAAATGATAGAAAATGGAGGGCAGATTCATGCTTCCCAGC
CTAGCATGTGACTTATTAATAAATAATATATTGTAAGAGTTTTGCTGTTTTACTATCTTTACCTCCCCTTAAGTACGAAGGGTTCG

15,045

PRKN

PRKN-206

AGTTCTGAAGGGGGTGAAGCAGGTGAGAGGAGGGTACGACTGTGAAAGGGTAACAGAAGGGACCCTTTGGTGACGGCCGTCTCTC
TCAAGACTTCCCCACCTTCGTCCACTCTCCTCCCATGCTGACACTTTCCCATTTGCTTCCCTGGGAAACCACTGCCGGCAGGAG

15,130

PRKN

PRKN-206

TGTGCTGACTGTAACAATGCTTATAGTACAATTATAACGTCTAGCTTGGCAAGATGTTACCACTGGCGGAAGCTGGGGAAAAGGT
ACACGACTGACATTGTTACGAATATCATGTTAATATTGCAGATCGAACCGTTCTACAATGGTGACCGCCTTCGACCCCTTTTCCA

15,215

PRKN

PRKN-206

AGCTGGCATCTTTCTCTGCTATCTCTTACAACCTGCGTTAGAATGTGTAAGCATTTTAATATAAAGTTGAATTTAAAAAAAACCTA
TCGACCGTAGAAAGAGACGATAGAGAATGTTGACGCAATCTTACACATTCGTAAAATTATATTTCAACTTAAATTTTTTTTGGAT

15,300

PRKN

PRKN-206

GGATATCTGTCCACTTTCACAGAGGAATTGAAACTATCACTTTCTTAGAAAATAAGCTTGCTATTTGTCTCTCTTTTAAAGGGAG
CCTATAGACAGGTGAAAGTGCTCTCCTTAACTTTGATAGTGAAAGAATCTTTTATTTCGAACGATAAACAGAGAGAAAATTTCCCTC

15,385

PRKN

PRKN-206

AGTATGTATTCAATGAGTGATATTTAACATAAGAAATGAGAAAAATAATTTAATTGATTAGCAGACACATTTAAAGACTTGTTCA
TCATACATAAGTTACTCACTATAAATTGTATTCTTTACTCTTTTTATTAAATTAACATAATCGTCTGTGTAATTTCTGAACAAGT

15,470

PRKN

PRKN-206

TACTAAGAGTACAGGGTGAGTAAAACTTATAGAGACATTAATGCCTCTTTCTTGAAGCCTTTTTTTATTTATTTATTTATTTTTT
ATGATTCTCATGTCCCACTCATTTTTGAATATCTCTGTAATTACGGAGAAAGAACTTCGGAAAAAATAAATAAATAAATAAAAA

15,555

PRKN

PRKN-206

TTGAGACAGAGTCTCGCTCTGTCGCCAGGCTGGAGTGCAATGGCACAATCCCTGCTCACTGCAAGCTCCGCCTCCCGGGTTCAA
AACTCTGTCTCAGAGCGAGACAGCGGGTCCGACCTCACGTTACCGTGTTAGGGACGAGTGACGTTTCGAGGCGGAGGGCCCAAGTT

15,640

PRKN

PRKN-206

GCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCGCCCGCTACCACGCCTGGCTCATTTTTGTGTTTTTAGTAGA
CGCTAAGAGGACGGAGTCGGAGGGCTCATCGACCCTAATGTCCGCGGGCGATGGTGCGGACCGAGTAAAAACACAAAAATCATCT

15,725

PRKN

PRKN-206

GACGGGGTTTACCATGTTGGCCAGGCTGGTCTTGAACCTCTGACCTCAGGTGATCCACTCATCTTGTCTCCCAAAGTGCTGAG
CTGCCCCAAAGTGGTACAACCGGTCCGACCAGAACTTGAGGACTGGAGTCCACTAGGTGAGTAGAACAGGAGGGTTTTACGACTC

15,810

PRKN

PRKN-206

ATTACAGGCATGAGCCACCACTCCTGGCCTCTTTCTTGAAGTCTTAAACAGAATTTTTAGCACATTATAGATCTGAATAGACATG
TAATGTCCGTAICTGGTGGTGAGGACCGGAGAAAGAACTTCAGAATTTGTCTTAAAAATCGTGTAATATCTAGACTTATCTGTAC

15,895

PRKN

PRKN-206

ATGAGTATTTATTTGCAAACCTTTTACCAAATATTTAAACTAAGCAAAAGTAAATAGTTCTTGACAATTGTGTAICTCCAGTTGTA
TACTCATAAATAAACGTTTGAGAAATGGTTTATAAATTTGATTCGTTTTTCATTTATCAAGAACTGTTAACACATGAGGTCAACAT

15,980

PRKN

PRKN-206

CATAGTTTTTAAATTGATTTGTTAGTCATACATTATAATTTTAGGAAATAAATGAGCCAGATCGGGCACAGTGGCTCATGCCCGT
GTATCAAAAATTTAACTAAACAATCAGTATGTAATATTTAAATCCTTTATTTACTCGGTCTAGCCCGTGTACCGAGTACGGGCA

16,065

PRKN

PRKN-206

AATCCAGCACTTTGGGAGGCCAAGACAGGCAGATCACGAGGTCAGGAGTTCGACACCAGCTTGACCAACATGGTGAAACCCCGT
TTAGGGTTCGTGAAACCTCCGGTTCTGTCCGTCTAGTGCTCCAGTCTCAAGCTGTGGTTCGAACTGGTTGTACCACTTTGGGGCA

16,150

PRKN

PRKN-206

CTCTACTAAAAATACAAAAATCACCTGTAATCCCAGCTACGTGGAAGGCTGAGGCGGAGAATCTCTTGAACCTGGGAGGGCGGAGG
GAGATGATTTTTATGTTTTTAGTGAGACATTAGGGTCGATGCACCTTCGACTCCGCCTCTTAGAGAACTTGGAACCTCCGCCTCC

16,235

PRKN

PRKN-206













TGGCAGTGAGCCAAGATTGCGCCATTGCACTCCAGCCTG
ACCGTCACTCGGTTCTAACCGGGTAACGTGAGGTCTGGAC

3 '
16,274
5 '

PRKN

PRKN-206

Feature	Location	Size			Type
✓ PRKN	1 .. 16,274	16,274 bp		→	gene
/note	= gene ENSG00000185345 Protein coding				
PRKN-201	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000338468 Nonsense mediated decay				
PRKN-202	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000366892				
PRKN-203	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000366894 Nonsense mediated decay				
PRKN-204	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000366896				
PRKN-205	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000366897				
✓ PRKN-206	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000366898				
PRKN-207	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000479615 Nonsense mediated decay				
PRKN-215	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000674232 Retained intron				
PRKN-217	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000674259 protein_coding_CDS_not_defined				
PRKN-221	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000674493 protein_coding_CDS_not_defined				
PRKN-222	1 .. 16,274	16,274 bp		→	prim_transcript
/note	= primary transcript ENST00000674501 Retained intron				
PRKN-210	1 .. 9339	9339 bp		→	prim_transcript
/note	= primary transcript ENST00000648830 protein_coding_CDS_not_defined				
PRKN-211	9174 .. 16,274	7101 bp		→	prim_transcript
/note	= primary transcript ENST00000673871 Nonsense mediated decay				
PRKN-202	9176 .. 9339	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence ENSP00000355858				
/translation	= FVRFNSSHGFPVEVDS DTSIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				
PRKN-204	9176 .. 9339	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence ENSP00000355862				
/translation	= FVRFNSSHGFPVEVDS DTSIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				
PRKN-205	9176 .. 9339	164 bp		→	CDS
/codon_start	= 1				
/note	= coding sequence ENSP00000355863				
/translation	= FVRFNSSHGFPVEVDS DTSIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				

Feature	Location	Size			Type
✓ PRKN-206	9176 .. 9339	164 bp			CDS
/codon_start	= 1				
/note	= coding sequence ENSP00000355865				
/translation	= FVRFNSSHGFPVEVDSDTISIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQ 54 amino acids = 6.2 kDa				
✓ Donor Sequence WT -> SNV	9226 .. 9325	100 bp			misc_feature
✓ PAM	9285 .. 9287	3 bp			misc_feature
✓ gRNA Protospacer Sequence	9288 .. 9307	20 bp			misc_feature
✓ SNV	9293 .. 9293	1 bp			misc_feature
/note	= WT = G SNV = C				

Primer	Length	Binding Sites	Tm	Date Added
✓ PCR Forward	25-mer	8784 .. 8808	58°C	Aug 18, 2023
/sequence	=	TTTATTAAGAGGGTCACTGTGGAGG 44% GC / 7792.2 Da		
✓ Donor Template WT -> SNV	100-mer	9226 .. 9325	79°C	Aug 18, 2023
/sequence	=	GACACCAGCATCTTCCAGCTCAAGGAGGTGGTTGCTAAGCGACAGGGGGTTCCGGCTGACCAAGTTGCCTGTGATTTTCGCAGGGAA 56% GC / 9330.0 Da		
✓ gRNA Protospacer	20-mer	9288 .. 9307	57°C	Aug 18, 2023
/sequence	=	CTGCGAAAATCACACGCAAC 50% GC / 6064.0 Da		
✓ Sanger Sequencing Primer	20-mer	9508 .. 9527	56°C	Aug 18, 2023
/sequence	=	CCTGCTTGCTGTTTTAATGC 45% GC / 6065.0 Da		
✓ PCR Reverse	25-mer	9738 .. 9762	58°C	Aug 18, 2023
/sequence	=	GGGTCACAATTGGGTTACAAATTCC 44% GC / 7681.1 Da		