

PRKN-202

Donor Template SNV -> Rev

gRNA Protospacer Sequence

SNV

ASK2J00176R_PRKN_T240M_B09_AA
17,583 bp

5'

3'

ATTTTACTTTTTAGGAATCACTTTTAAACATCTTCTTTAAACAATCTCCCTTTTGCTCTTAAAGTTATAAACATCAAATTTATGGCTG
TAAAAAGAAAAGTCCTTAGTGAAAATTGTAGAAGAAAATTGTTAGAGGGGAAAACGAGAATTTCAATATTTGTAGTTTAATACCGAC

85

PRKN

PRKN-202

AGTGGCATTACACCTGGAATAAACTTCAAGGCACACTGAAGAACTTACAATCAGGCAGAGAAGGGGCGGATGTGGGTTGTTATAT
TCACCGTAATGTGGACCTTATTTGAAGTTCGGTGTGACTTCTTGAATGTTAGTCCGTCTCTTCCCGCCTACACCCAACAATATA

170

PRKN

PRKN-202

TAGCCAACCTTTTGTTTTAAAGTTAGACTTCTTGAAGACATGTACCATAAACTGACAGCCTCCTTCTCAGCAAAGTTGTGACATGGT
ATCGGTTGAAAACAAAATTCAATCTGAAGAACTTCTGTACATGGTATTTGACTGTCCGGAGGAAGAGTCGTTTCAACACTGTACCA

255

PRKN

PRKN-202

TTTGCTTTGTGTGGAGTATATTGATTTTCTTCTCCTGATAAACTTTGCACATCATCTAGAGGCTTTATTGACATCTTGAGAGAA
AAACGAAACACACCTCATATAACTAAAAGAAAGAGGACTATTTGAAACGTGTAGTAGATCTCCGAAATAACTGTAGAACTCTCTT

340

PRKN

PRKN-202

AACAAACTTGTAATTGAACATGGTGATAGACTCATTAACTTTTTAGGTCTGATCTGTTTGACTAGGTGTAACCTTAATTGTAAAAC
TTGTTTGAACATTAACCTTGTACCACTATCTGAGTAATTGAAAAATCCAGACTAGACAAACTGATCCACATTGAATTAACATTTTG

425

PRKN

PRKN-202

TGGCATTGTTAATTTAACAAAGTGACATTTATTATATAGTCTCCAGTTTGCATAGTTACTTTGTATCAGAACTGATAAATTCA
ACCGTAACAATTAATTTGTTTCACATGTAAATAATATATCAGGAGGTCAAACGTATCAATGAAACATAGTCTTGACTATTTAAGT

510

PRKN

PRKN-202

GTTACTGGGTTTATGTAATACCCAGTAAGTCGAACACTTCAGTATGAAGGCTAAGACACAATAAAGAAGTCACAAGATAAACAGG
CAATGACCCAAATACATTATGGGTCATTCAGCTTGTGAAGTCATACTCCGATTCTGTGTTATTTCTTCAGTGTCTATTTGTCC

595

PRKN

PRKN-202

CTTTGCCATGGCTATTTTAAAGGCTTTTTTTATGTATTAGGTAGAGAATGTTGTGGTTATGCTTTTATCTGGCATTTTTTGGTTTG
GAAACGGTACCGATAAAATTTCCGAAAAAATACATAATCCATCTTTACAACACCAATACGAAATAGACCGTAAAAAACCAAC

680

PRKN

PRKN-202

TTTTTGTGGAGTTTCTGTTTGTTTTAAAGACAGGGTCTTGCTATGTTGCCCTTGCTGGTCTCAAATTCCTGGGCTCAAGCGATC
AAAAACACCTCAAAGACAAACAAAAATTTCTGTCCGAGAACGATACAACGGGAACGACCAGAGTTTAAGGACCCGAGTTCGCTAG

765

PRKN

PRKN-202

CTCCTGCCTCAGCCTCCCAAATAGCTGGGACAATGGGTGTGTTCCACCCTACCCAGCTGACATGTTTTAACTTAAAGAAAATTAA
GAGGACGGAGTCGGAGGGTTTATCGACCCTGTTACCCACACAAGGTGGGATGGGTGCGACTGTACAAAATTGAATTTCTTTTAATT

850

PRKN

PRKN-202

AACTTTATTATTAAGATTAATAATGAAACCTCTGCATGGATAGGAAGACTTAAAACTAGTAGTTGTGTCTTAGAAAAAGAATCTGT
TTGAAATAATAATTCTAATTATTACTTTGGAGACGTACCTATCCTTCTGAATTTTGTATCATCAACACAGAATCTTTTTCTTAGACA

935

PRKN

PRKN-202

ATCTCACTAACGAGGAACTATTCTAGCCTGGACAGTTTCTGAGGAGAGAGTAAGTGGGGAATATCTGTTGCTGTTAGCTACAAAC
TAGAGTGATTGCTCCTTGATAAGATCGGACCTGTCAAAGACTCCTCTCTCATTGACCCCTTATAGACAACGACAATCGATGTTTG

1020

PRKN

PRKN-202

AGGATTTTAGGTTTGTGAGAGGCATTTAGATTGATTTGAAGTGACAGGCTGTCTGTCTTAACCTTGGTAAGTGTGAGAATCTTTCT
TCCTAAAATCCAAACACTCTCCGTAAATCTAACTAACTTCACTGTCCGACAGACAGAATTGAACCATTGACACTCTTAGAAAAGA

1105

PRKN

PRKN-202

GATATAGATGTAAGATACTTATTACGAGTTCATCTCATAAGCAGTAACCACAGCCCTGTATCCTGTTAATATCATCGGAAAATTT
CTATATCTACATTCTATGAATAATGCTCAAGTAGAGTATTCGTCATTGGTGTCGGGACATAGGACAATTATAGTAGCCTTTTTAAA

1190

PRKN

PRKN-202

GGATGGATAGTCTTTTGACGAGTATAGTTGAGTTTAATCTCAATATACAATGTATATTTGTGTGAGTATTTCTGTATCTTCAATA
CCTACCTATCAGAAAAGTCTCATATCAACTCAAATTAGAGTTATATGTTACATATAAACACACTCATAAAGACATAGAAGTTAT

1275

PRKN

PRKN-202

CATATTTACAACAATATCTGAATGTGTATTTTTGTTTTAGTGGAGGCTGATTAGAATGTGTCACCACTAACAAAGGGTGACAC
GTATAAAGTGTGTTATAGACTTACACATAAAAAACAAAAATCACCTCCGACTAATCTTACACAGTGGTGATTGTTCCCACTGTG

1360

PRKN

PRKN-202

TTGGAGAATTTTGATCTCACACAGGGTCCACCTCGTGGTGGTGCAGCAGTCATCTGCTGGTGGCTTTTCAGACCCAAGCCACCTTT
AACCTCTTAAAAGTGTGTTCCAGGTGGAGCACCACCACGTCGTCAGTAGACGACCACCGAAAGTCTGGGTTCCGGTGGAAA

1445

PRKN

PRKN-202

TCCCCCTCTCTGCTCTGTAAGTTGGGGCTGTTTCTGGAGATGGGAGGGCCAAGAGAAGGCAGAAAGCCAGGGGCATTTCTCCCTCT
AGGGGGGAGAGACGAGACATTCAACCCCGACAAAGACCTCTACCTCCTCCGGTTCTCTTCCGTCTTCGGTCCCCGTAAAGAGGGGAGA

1530

PRKN

PRKN-202

CTCTCTAGGGGACATCTCTGGCAGTGGCTTCATCCATTCAATTGTCAGACTCCCAACCAGATAGCCCAGCTGCAGAGCTGTGGTG
GAGAGATCCCCTGTAGAGACCGTCAACGAAGTAGGGTAAGTAACAGTCTGAGGGTTGGTCTATCGGGTGCAGCTCTCGACACCAC

1615

PRKN

PRKN-202

ACTCCAATACCTTCTCCATTGTCCTCTAGCCCCAGATGGCAGCTGTGCAATAATGACGCTAATCTCAAGTGGCTTCCCTTTCTCT
TGAGGTTATGGAAGAGGGTAACAGGAGATCGGGGTCTACCGTCGACACGTTATTACTGCGATTAGAGTTCACCGAAGGAAAAGAGA

1700

PRKN

PRKN-202

GTTTAGTTCTTCTGTGCTTCCACTCCTCTATAACTAATCTCATTCAATTCCGTCAGTTGAACTACCTGGTGTGGGCCCTGTTTTTC
CAAATCAAGAAGACACGAAGGTGAGGAGATATTGATTAGAGTAAGTTAAGGCAGTCAACTTGATGGACCACACCCGGGACAAAAG

1785

PRKN

PRKN-202

CTAACTATACCCTGAGCCATGCAAATAGCTATGCAGTTACGTGTTAAGTACAAACCTTATACCCTTTGCAACCTTGTTAGTGGAA
GATTGATATGGGACTCGGTACGTTTATCGATACGTCAATGCACAATTCATGTTTGGGATATGGGAAACGTTGGAACAATCACCTT

1870

PRKN

PRKN-202

AGTGTGTGTCCCCATTACTTTATCAAGAGAAGGATAGTTTTTTTTTTCTTTTGGGAAATATTAACCTAAGAAGGATTTGGAGACAAG
TCACACACAGGGGTAATGAAATAGTTCTTCTTCTATCAAAAAAAAAAGAAAACCTTTATAATTGATTCTTCTTAAACCTCTGTTTC

1955

PRKN

PRKN-202

AATGGAATTTAACTCTTTGTGAAGATAGATACAATATTTTCGTTTGGAAAACATAATTGTTAAACAATATCTATAAACATAAAAATT
TTACCTTAAATTGAGAAACACTTCTATCTATGTTATAAAGCAAACCTTTTGTATTAACAATTTGTTATAGATATTTGTATTTTTAA

2040

PRKN

PRKN-202

TAGGATGTTCAATAAAAAGCTATTGGAAGGATCATGGGTAACCTAAGTCAGGTCTTACTGCTAATGATTTTTTTCAGATTTGACCATA
ATCCTACAAGTTATTTTTCGATAACCTTCTTAGTACCCATTGATTCAGTCCAGAATGACGATTAATAAAAAGTCTAAACTGGTAT

2125

PRKN

PRKN-202

TTAGGACTGTGATAAGCAGGGCTTTCAAGCCAGTTGTCATCTACCTTTATAGTAATTTGAAATCTATCAAATTGTATTTGGGTTT
AATCCTGACACTATTCGTCCCAGAAAGTTCGGTCAACAGTAGATGGAAATATCATTAAACTTTAGATAGTTTAACATAAAACCCAAA

2210

PRKN

PRKN-202

GGCTAATTCGCTTCTGATCGTAAATGTGTTTATACAGTTGGATTCTTGGTGTCAATCTAATTTTTCAGATTTTGGCTGGGCTATTTA
CCGATTAAGCGAAGACTAGCATTTACACAAATATGTCAACCTAAGAACCACAGTTAGATTAAGTCTAAAACGACCCGATAAAT

2295

PRKN

PRKN-202

TTCCATTCTTCTTGCTCTAGTTTTCTCTTTGTGAGTGGCACTGCTTATGAGTCATGGGTGAAGGGACATAAGTGAGCAGGAGTG
AAGGTAAGAAGAACGAGATCAAAAGGAGAAACACTCACCGTGACGAATACTCAGTACCCACTTCCCTGTATTCACTCGTCTCTCAC

2380

PRKN

PRKN-202

GCTTCCAGGAATACCACAGTCCAGTTGACATCTTCTGCTCTTCTCCCCTGGTCCCCCTTTGATTTGTATGGGTCTGATGTGATT
CGAAGGTCTTTATGGTGTCAAGGTCAACTGTAGAAGGACGAGAAGAGGGGGACCAGGGGGGAAACTAAACATACCCAGACTACACTAA

2465

PRKN

PRKN-202

TGGAGGGTCAGGCTTCGACAGTGAGGAGGAGAGGGCAAGTGAGTTATGATGAAAGAGAAGAATGGAAGGAAGGGATCACAGCCTT
ACCTCCCAGTCCGAAGCTGTCACTCCTCCTCTCCCGTTCACTCAATACTACTTTCTCTTCTTACCTTCTTCCCTAGTGTCCGAA

2550

PRKN

PRKN-202

GTCCAGAGAAATGGTAAAAGCATGAGTAGCCTTTCTAAGAACTTGAGGAATACAACCTTTGTTGGGTTTTCCATTTAATACTAATG
CAGGTCTCTTTACCATTTTTCGTACTCATCGGAAAGATTCTTGAACCTCTTATGTTGAAACAACCCAAAAGGTAAATTATGATTAC

2635

PRKN

PRKN-202

AAGTGGAAAACGGTCCGGGCGCAGTGGCTCTTGCTGTTTTTCCAGCACTTTGAAAGGCTGAGGTGGGTGGATCACTTGAGGTCA
TTCACCTTTTGCCAGGCCCGCGTCAACGAGAACGGACAAAAGGGTCGTGAAACTTTCCGACTCCACCCACCTAGTGAACCTCCA

2720

PRKN

PRKN-202

GGAACCTCGAGACCAGCCTGGCCAACATGGTAAAACCTTCATCTCTACTAAAAATACAAAAAATTAGCCAGGCATGGTGGCACACAC
CCTTGAGCTCTGGTCGGACCGGTTGTACCATTTTTGAAGTAGAGATGATTTTTATGTTTTTAAATCGGTCCGTACCACCGTGTGTG

2805

PRKN

PRKN-202

CTATGATCCCAGCTATTCAGGAGGCTGAGACATGAGATTTGCTTGAAACTGGGAGGCGTAGGTTGCAGTAAGCCAAGATCGTGCC
GATACTAGGGTCGATAAGTCCTCCGACTCTGTACTCTAAACGAACTTTGACCTCCGCATCCAACGTCATTCGGTTCTAGCACGG

2890

PRKN

PRKN-202

ACTGCATTCCAGCCTGGGTTACAGGGGGAGACCGTGTCTCAAAAAATAAATAAAGTTGAAAACGCTTATGGCATTTAACAGTGT
TGACGTAAGGTCGGACCCAATGTCCCCCTCTGGCACAGAGTTTTTTTTATTTATTTCAACTTTTTGCGAATACCGTAAATTGTCACA

2975

PRKN

PRKN-202

CACAATATAAAGCCAAGCACATTTTTCTAAAGCCTTATTTTTTTCAAGTATAAAATCATTTAGGCTATCATTTGGAAAAACAAAA
GTGTTATATTTTCGGTTCGTGTAAAAGATTTTCGGAATAAAAAAAGTTTCATATTTAGTAAATCCGATAGTAAACCTTTTTGTTTTT

3060

PRKN

PRKN-202

CAAAAACTGGCCATTTGCTGTTATAGATTTTAGCTCTCTTCGCTAATTAAGGTTTCCCAGAAGTGAAGTATTGGTATACAAATGA
GTTTTTTGACCGGTAAACGACAATATCTAAAATCGAGAGAAGCGATTAATTCAAAAGGGTCTTCACTGATAACCATATGTTTACT

3145

PRKN

PRKN-202

TGTGAGTAAGCCCCTGGGAATTATAGCTCCTGGTTAGGTGGGGGAATCTTTCTGTAGCTGATTTATCTGTGAACTACCATTTGTA
ACACTCATTCCGGGACCCCTTAATATCGAGGACCAATCCACCCCTTAGAAAAGACATCGACTAAATAGACTTGTGTTAAACAT

3230

PRKN

PRKN-202

AGAGGTGGGGTGGGCCGCTCTGAGACTCAGTTTACCCGCGTAAAGGATTCTGTTCCAGCCACACTAGAATTGACAGCTGGGCTT
TCTCCACCCACCCGGCGAGACTCTGAGTCAAATGGGCGGCATTTCTAAGACAAGGTCGGTGTGATCTTAACTGTGACCCGAA

3315

PRKN

PRKN-202

CCTGATGAAGAGGACACTGCCCGGCTGCTCCCCAGAATACTCTGCTTCCCTAGTGACCGAGAAGCAACTTCCCCGGCCAACCCC
GGACTACTTCTCCTGTGACGGGCCGACGAGGGGGTCTTATGAGACGAAGGGATCACTGGCTCTTTCGTTGAAGGGGGCCGGTTGGGG

3400

PRKN

PRKN-202

TGCACACGCTAGAACTCAAACAATGCCACCTTGAGCAGCCTTGCCCTCAGGCATAACCCTGTGCTCAGCACAGCTGGAGATGTT
ACGTGTGCGATCTTGAGTTTGTACGGTGGAACCTCGTCGGAACGGAGTCCGTATTGGTGACAGCGAGTCGTGTGACCTCTACAA

3485

PRKN

PRKN-202

TCTTGCCCACTTGGCTTGGGCCCTGCTATGCCCCAGTGACCTCACAGTGGTGCAGTGGTGCCAGCCTTCTGACCAGCCTTCTTGG
AGAACC GG TGAACCGAACCCGGGACGATACGGGGTCACTGGAGTGTCAACCACGTCAACCACGGTCGGAAGACTGGTCGGAAGAACC

3570

PRKN

PRKN-202

ACTCCAGCTAGAAAGCTTTCCTGTCTTTGACTTTTTTAATTTTTTAAACTGAGTAATTAAGAGAAACAAAACAGAATTCAGAGGC
TGAGGTCGATCTTTCGAAAGGACAGAAACTGAAAAAATTAATAAATTTGACTCATTAAATCTCTTTGTTTTGTCTTAAGTCTCCG

3655

PRKN

PRKN-202

AGTTAATCCCAAAGAATCATGCCACTGTCTGTGAGATGACACCCATGTGTGAACAAGCCATCTCAGACACCCAAGGTGGAATTTT
TCAATTAGGGTTTCTTAGTACGGTGACAGACACTCTACTGTGGGTACACACTTGTTCGGTAGAGTCTGTGGGTTCACCTTAAAA

3740

PRKN

PRKN-202

CGAAAAAGGCCCTTCTCACTTCTATTGTGTGTTCCCTTTATTGTCTGCTGGTTTTGAATACAGATTGGAAGTGTGAGAAAAGACTT
GCTTTTTCCGGGAAGAGTGAAGATAACACACAAGGAAATAACAGACGACCAAACTTATGTCTAACCTTCACAGTCTTTTCTGAA

3825

PRKN

PRKN-202

CAACAATCCAGCCCACTGATTGTACAGGAGCAGAAATGACCAGATCGGCCGGGCACAGTGGCTCACACCTGTAATCCCAGCACTT
GTTGTTAGGTCGGGTGACTAACATGTCCTCGTCTTTACTGGTCTAGCCGGCCCGTGTCAACGAGTGTGGACATTAGGGTCGTGAA

3910

PRKN

PRKN-202

TGGGAGGCCGAGGCCGGTGGATCACCTGAGGTCTGGAGTTTGACATCAGCTGATTAACATGGTGAAACCCCATCTCTACTAAAA
ACCTCCGGCTCCGGCCACCTAGTGGACTCCAGACCTCAAACCTGTAGTCGACTAATTGTACCCTTTGGGGTAGAGATGATTTTT

3995

PRKN

PRKN-202

TATAAAAAATTGGTTGGGCATGGTGGCACATGCCTGTAATCCCAGCTATTCCGGGAGGCTGAGGCAGGAGAATTAATTTGAACCTGG
ATATTTTTTAACCAACCCGTACCACCGTGTACGGACATTAGGGTCGATAAGCCCTCCGACTCCGTCTCTTAATGAACCTGGACC

4080

PRKN

PRKN-202

GAGGCAGAGGTTGCAGTGAGCCAAGATCGCACCATGCACTACAACCTGGGGCAAAAAGAGCAAAACTCCCATCTCAAAAAAATAA
CTCCGTCTCCAACGTCACTCGGTTCTAGCGTGGTAACGTGATGTTGAACCCGTTTTTCTCGTTTTGAGGGTAGAGTTTTTTTATT

4165

PRKN

PRKN-202

AATAAAATAAAATAAAATAAAATAACAATAAAATAAAATAACAATAAAATAACTGCAAAATAGCCTGCAAGAAAAGGTGTTATTATT
TTATTTTATTTTATTTTATTTTATGTTATTTTATTTTATGTTATTTTATTGACGTTAATCGGACGTTCTTTTCCACAATAATAA

4250

PRKN

PRKN-202

GAGAAGCAATTCTCCATGGGTCTGTCAATTTGTCCGCTCATCTCTGAGGGAGACACCAACTTGTCTGACCCATCTTTTCAAGGAA
CTCTTCGTTAAGAGGTACCCAGACAGTAAACAGGCGAGTAGAGACTCCCTCTGTGGTTGAACAAGACTGGGTAGAAAAAGTTCCTT

4335

PRKN

PRKN-202

GTTTTAGAGCAAATGACCTTGAAAGTAGAGAAGATAGGGCCGGGCGTGGTGGCTCACACCTGTACAATCCCAACACTTTTGGGAGG
CAAAATCTCGTTTACTGGAACCTTTCATCTCTTCTATCCCGGCCCGCACCACCGAGTGTGGACATGTTAGGGTTGTGAAACCTCC

4420

PRKN

PRKN-202

CCAAGGTGGGCAGATCACGAGGTCAGGAGATTGAGACCATCCTGGCTAACATGGTGAACCCCGTCTCTACTAAAAATACAAAA
GGTTCCACCCGTCTAGTGCTCCAGTCTCTAACTCTGGTAGGACCGATTGTACCACCTTTGGGGCAGAGATGATTTTTATGTTTTT

4505

PRKN

PRKN-202

AGTAGCCGGGCGTGGTGGCGGGCGCCTTGTGGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGGTGG
TCATCGGCCCGCACCACCGCCCGCGGAACACCAGGGTCGATGAACCTCCGACTCCGTCTCTTACCACCTTTGGGCCCTCCACC

4590

PRKN

PRKN-202

AGCTTGCAATGAGCCAAGATCGTGCCACTGCGCTCCAGCCTGGGCGACAGAAAAGACTCTGTCTTAAAAAAAAAAAAAAAAAAAA
TCGAACGTTACTCGGTTCTAGCACGGTGACGCGAGGTCGGACCCGCTGTCTTTTCTGAGACAGAATTTTTTTTTTTTTTTTTTTT

4675

PRKN

PRKN-202

AAACCAAAAAACAGAAAGTAGAGAAGATAATGTTTCTCTCCAGATCAAAAGGCAGATTTGCTTATTATGCAGTATAATAAAGAC
TTTGGTTTTTTTGTCTTTCATCTCTTCTATTACAAAGAGAGGTCTAGTTTTCCGTCTAAACGAATAATACGTCAATATTATTCTG

4760

PRKN

PRKN-202

AATGTTTCCCTTCAGGATGAAAAGATGACTTGCTTAGAACTACTTAAAGAAGATTTGAGTTTCCTAAGTTCAGAGTTCTCATTG
TTACAAAGGGAAGTCTACTTTTCTACTGAACGAATCTTGATGAATTTCTTCTAAACTCAAAGGATTCAAGTCTCAAGAGTAAAC

4845

PRKN

PRKN-202

TGATGCAAAACCACTGCACCTGTAGAATCTGACTTAGCCTATCTACTTCAACCCTGAGAGAGACGTGTGGAGGGGAACTGGTGTA
ACTACGTTTTGGTGACGTGGACATCTTAGACTGAATCGGATAGATGAAGTTGGGACTCTCTCTGCACACCTCCCTTGACCACAT

4930

PRKN

PRKN-202

ATATGATGCTCATGCTTCTTCTCCCTGTGCTCTGAGTTCTGCAGTCCTTTGTCTCTGATCCAGGAGTCTCTTGTCTTCTGTGTA
TATACTACGAGTACGAAGAAAGAGGGACAGAGACTCAAGACGTGAGGAAACAGAGACTAGGTCTCAGAGAACAGAAAGACAGTC

5015

PRKN

PRKN-202

CTTTTATGATACTGCAGCAAATAACTTGCTAACTTGCAAGCTGGGTAAAATCCCACATTCTTACAGTTCTTGCCAGTTATTCT
GAAAATACTATGACGTCGTTTGAATTGAACGATTGAACGTTTCGACCCATTTTAGGGTGTAAAGAAGTGTCAAGAACGGTCAATAAGA

5100

PRKN

PRKN-202

AGTACTACAACAAAAACATTCTTTTCATAAAAAATTGGTGGAGAAAGCACTGAAATTTACTGTTGAGGCATACATATTTAATATAGG
TCATGATGTTGTTTTTGTAAAGAAAGTATTTTTAACCACCTCTTTTCGTGACTTTAAATGACAACCTCCGTATGTATAAATTATATCC

5185

PRKN

PRKN-202

GTTGGCAATGTGAGTTTTAGTTTTATCAACACTATATGTGTTACTAGAAATTTTCAACTATCTGTAATTTCTTAAACCATTATCT
CAACC GTTACACTCAAAATCAAAATAGTTGTGATATACACAATGATCTTAAAAAGTTGATAGACATTAAGAATTTGGTAATAGA

5270

PRKN

PRKN-202

ATAAACACCTACCCCAATAAAAAAGGCTTTTTATCTGGCTGAATTTTATCTGGTGTGAGAACAATTTGTGATTTGTTAGCTGAATG
TATTTGTGGATGGGGGTTATTTTTCCGAAAATAGACCGACTTAAAATAGACCACAATCTTGTTAAACACTAAACAATCGACTTAC

5355

PRKN

PRKN-202

TCCACTGCAGCTTTCTGTAAGCTAAGAAAAAACGTAAGTGCTTTCTATCTATTTATCTGTATATGAAATACTTTTTCAATAGTCC
AGGTGACGTCGAAAGACATTCGATTCCTTTTTGCATTCACGAAAGATAGATAAATAGACATATACTTTATGAAAAAGTTATCAGG

5440

PRKN

PRKN-202

TGCCAACTCAGCTGTTTTGGAGGAATTACTTTATGTTTTGAAAAGAGGATTTTTTTCATGTCTGCAAAAACAGTCGTAGCTAGCT
ACGGTTGAGTCGACAAAACCTCCTTAATGAAATACAAAACCTTCTCCTAAAAAAGTACAGACGTTTTTGGTCAGCATCGATCGA

5525

PRKN

PRKN-202

CAGCGTATTTTCATAAGGGTCAGTCATGTCCTTCAGACTTTTCGTTTTGGTGTTCAGACATTGTTTTAAATCTCTTTCTCAATACC
GTCGCATAAAGTATTCAGTCAGTACAGGAAGTCTGAAAAGCAAAACCACAAGTCTGTAACAAAATTTAGAGAAAAGAGTTATGG

5610

PRKN

PRKN-202

CTTGAGCTGGCCATTGAAGGATTTGTCACATTTCAAAGATTGAGTAAAAGGAATGGGATCCTATGTTTCAGGAAAACAAAACATA
GAACTCGACCGGTAACCTCCTAACAGTGTAAGTTTTCTAACTCATTTTCTTACCCTAGGATACAAGTCCTTTTGTGTTTGTAT

5695

PRKN

PRKN-202

ACCAAACAAAAACATCAGCCAGCATGATTTCCATGCTGCTGTGGGGAAGGTCTGGACTCATGGGCAGGACTCCACAGGCATGCC
TGGTTTGTGTTTTGTAGTCGGTCGTAATAAGGTACGACGACCCCTTCCAGGACCTGAGTACCCGTCCTGAGGTGTCCGTACGG

5780

PRKN

PRKN-202

TGAGCCTGGGCCCATCACACACACTGGACATCCTGTCCACTCCAGCAAGACTCCACACACATGCCTCCATGGGCTGAGGACTGCA
ACTCGGACCCGGGTAGTGTGTGTGACCTGTAGGACAGGTGAGGTGCTTCTGAGGTGTGTGTACGGAGGTACCCGACTCCTGACGT

5865

PRKN

PRKN-202

GGTGTGAGGACCGGCTGATATTCCTGCCCCAGATAGGATAGGTTTTAGTTAACTAAATTATACCACCTGGGATTGGTGAGACTT
CCACACTCCTGGCCGACTATAAGGTGACGGGGTCTATCCTATCCAAATCAATTGATTTAATATGGTGGACCCCTAACCACTCTGAA

5950

PRKN

PRKN-202

GTAGTGAAGAATAGCCTGGGTTCCAAATCCCTGGCTTTGGGATACTCTCATCAAAATGGCACACTCAGCCAGGCACAGTGGCTCA
CATCACTTCTTATCGGACCCAAGGTTTAGGGACCGAAACCTATGAGAGTAGTTTTACCCTGTGAGTCGGTCCGTGTCAACCGAGT

6035

PRKN

PRKN-202

CACCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGTGGATCACTTGAGGTCAGGAGTTCAAGACTAGCCTGGCCAACACGGTG
GTGGACATTAGGGTCGTGAAACCTCCGGCTCCGTCCACCTAGTGAACCTCAGTCCTCAAGTTCTGATCGGACCGGTTGTGCCAC

6120

PRKN

PRKN-202

AAACCCCATCTCTACAAAAATACAAAAATTAGCCTGGCATGATGGCGGGTGCCTGTAATCCCAGCTACTCGGGAAGCCAAGGAGG
TTTGGGGTAGAGATGTTTTATGTTTTAATCGGACCGTACTACCGCCACGGACATTAGGGTCGATGAGCCCTTCGGTTCTCTCC

6205

PRKN

PRKN-202

GAGAATCACTTGAACCTGGGAGGCCGAGGTTGCAGTGAGCCAAGACTGCACTAATGCATTCCAGCCTAGGCGATAGAGTGAGACT
CTCTTAGTGAACCTTGGACCTCCGCCTCCAACGTCACTCGGTTCTGACGTGATTACGTAAGGTCGGATCCGCTATCTCACTCTGA

6290

PRKN

PRKN-202

CTGTCTCAAAAAAAAAAGTAAAATGGCACACTCCAGATTTTTGAGAGTCACATATTTTACGTAAGATGTAGCATTATTTTCAGACA
GACAGAGTTTTTTTTTTCATTTTACCCTGTGAGGTCTAAAACTCTCAGTGTATAAAATGCATTCTACATCGTAATAAAAAGTCTGT

6375

PRKN

PRKN-202

CGGTAAGCGACCTGCCACAGCAGCGGTCTTGCAGAGAGTAAGTAGAGTTTACTCACTTTGCCTCTGACATTGGTGGAGCTCAGG
GCCATTTCGCTGGACGGTGTCTGTCGCCAGAACGCTCTCTCATTGATCTCAAAATGAGTGAAACGGAGACTGTAACCACCTCGAGTCC

6460

PRKN

PRKN-202

TTTCCAAGTGTGGGCCCTGAGCGGTAGGAACAACATCACCTGGCAAGTTGTTAGAAATGCGAATCTTGATGCCATCCCAGAAA
AAAGGGTTCACACCCGGGGACTCGCCATCCTTGTGTAGTGGACCGTTCAACAATCTTTACGCTTAGAACTACGGTAGGGTCTTT

6545

PRKN

PRKN-202

TCACAAAAATCCCAGGGTGGGTTTCAGCGATCTCTGGTTTTAGCAAGTCCGTGCCCCCTCCACCCGAGTGATTCTGATGCACACTA
AGTGTTTTTAGGGTCCCACCCAAGTCGCTAGAGACCAATCGTTCAGGCACGGGGGAGGGTGGGCTCACTAAGACTACGTGTGAT

6630

PRKN

PRKN-202

CAGCTTCAGACCAAGGGCTGTTGCTCATGGTGTACATGTCAGAGGAGGATGAGGTTAGTAAATTATAAACAGGAAAAAGAAGAAA
GTCGAAGTCTGGTTCCCGACAACGAGTACCACAGTGTACAGTCTCCTCCTACTCCAATCATTTAATATTTGTCTTTTTCTTCTTT

6715

PRKN

PRKN-202

TCAAAATGTTGCTGTCAAACGTATAAGGGGATAACATATAGCATTTATTAATAAATGATAAATAACATTGATTAATAAGCGTTGA
AGTTTACAACGACAGTTTGCATATTCCTTATTGTATATCGTAAATAATTTATTTACTATTTATTGTAACATAATTTATCGCAACT

6800

PRKN

PRKN-202

TTAATCTATTGTTTTTCACTTAAGAAGTATATGTCAGGCTGGGCATATTACAGGCTCACACCTGTAATCCCAGCACTTTGGGAGG
AATTAGATAACAAAAAGTGAATTCTTCATATACAGTCCGACCCGTATAATGTCCGAGTGTGGACATTAGGGTCTGTGAAACCTCC

6885

PRKN

PRKN-202

CCAAGGCAGGCAGATCACGAGGTCAGGAGATCAGGACCATCCTGACTAAAATGGTGAAACCCCGTCTCTACTAATACGAAAAATT
GGTTCCGTCCGTCTAGTGCTCCAGTCTCTAGTCTGGTAGGACTGATTTTACCACCTTTGGGGCAGAGATGATTATGCTTTTTTAA

6970

PRKN

PRKN-202

GGCCAGGCAGTGGTGGCGGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGCGTGAGCCAGGAGGCAGAGTT
CCGGTCCGCACCACCGCCCGTGGACATCAGGGTCGATGAGCCCTCCGACTCCGTCTCTTACCGCACTCGGGTCTCCGTCTCAA

7055

PRKN

PRKN-202

TGCAGTGAGCTGAGATCGCGCCACTGCACTCCAGCCTGGAAGGCAGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAGT
ACGTCACTCGACTCTAGCGCGGTGACGTGAGGTCGGACCTTCCGTCTCTGAGGCAGAGTTTTTTTTTTTTTTTTTTTTTTTTTTCTTCA

7140

PRKN

PRKN-202

ATATGTCATGCCTATCCTAATGTCAGTCACTGTTAGAATACAAATATGAATAAAGCATTCTACAAATGTCTCATCATGGCCTGCA
TATACAGTACGGATAGGATTACAGTCACTGACAATCTTATGTTTATACTTATTTTCGTAAGATGTTTACAGAGTAGTACCGGACGT

7225

PRKN

PRKN-202

GGGAAAAATCCAACCTTGCCACATATTTTGTAAATAAGGTTTTGTTAGGACACAGCCACACCCATTTCATTTGCATACTGCTTATGG
CCCTTTTTAGGTTGAACGGTGTATAAAACATTTATTCCAAAACAATCCTGTGTGCGGTGTGGGTAAGTAAACGTATGACGAATACC

7310

PRKN

PRKN-202

CTGTTTTTAGCTACAAGGCCAAGTTGAGAAGTGTGACAAAGACCATATACCCTACAAAACCAAAGCACTTAATGCGTAATATCT
GACAAAAATCGATGTTCCGGTTCAACTCTTCACACTGTTTCTGGTATATGGGATGTTTTGGTTTTTCGTGAATTACGCATTATAGA

7395

PRKN

PRKN-202

GGCACTTTACATCAAAGTTTGTCAATACCAGATCAAGTGTTTTAAAGGGAAAAATCCTTCCCACATTTTCAGGTAGTTAAACGCAAGT
CCGTGAAATGTAGTTTCAAACAGTTATGGTCTAGTTTCAAAAATTCCTTTTTAGGAAGGGTGTAAAGTCCATCAATTTGCGTTCA

7480

PRKN

PRKN-202

GGAATTAGGAGTATGTGTGGTATGCAGGGGTTATTCTGTCATCCAGTAAAATATATGTATTTTTTTTTTTTTCAGTAGCAAAAAATTT
CCTTAATCCTCATAACACCATACGTCCCAATAAGACAGTAGGTCATTTTATATACATAAAAAAAAAAAGTCATCGTTTTTTTAAA

7565

PRKN

PRKN-202

AGCTTCACAGATGTTAGTATCATGGAAGGCATGCAGACTGTGGGACAAGAAGTAAAGCAATTGCTGGCCAAACGCCTTGGTGTGT
TCGAAGTGTCTACAATCATAGTACCTTCCGTACGTCTGACACCCTGTTCTTCATTTTCGTTAACGACCGGTTTGCGGAAACCACACA

7650

PRKN

PRKN-202

GAGTGAACAGAAAGGAGAGTGAGAACAAATACAGAAGTTAGAACAGAAAAAAGTGAAGAAAAAACGTGGTTGAGAAGGGGAGAATAT
CTCACTTGTCTTCCTCTCACTCTTGTGTTATGTCTTCAATCTTGTCTTTTTTCACTTCTTTTTTGCACCAACTCTTCCCTCTTATA

7735

PRKN

PRKN-202

TATCAATCAAAAGAACGTGACCTATGTGAAAAGCTAAAATGAGGGAGTATGTGGCAGGACCTGGCTGGGGAAAGGAACTAAGAAG
ATAGTTAGTTTTCTTGCCTGACTGGATACACTTTTCGATTTTACTCCCTCATAACCGTCTGGACCGACCCCTTTCCTTGATTCTTC

7820

PRKN

PRKN-202

CAGCAAGATACTGGATTGGAGCATTCCAGTTGCCTGGCACAGAGGGTGGGCGGCAGAGTCTTCGCAGGAATGCTGGGGTGTGAT
GTCGTTCTATGACCTAACCTCGTAAGGTCAACGGACCGTGTCTCCACCCGCGTCTCAGAAGCGTCTTACGACCCCACTA

7905

PRKN

PRKN-202

GCCAGGCAGAAAAAGGGGCAGACTCCAGATGGGGCTGGGAGAGCCATGCTCTGCTAAACTCTCGGCTGGAATTTAGTGGGGTGATC
CGGTCCGCTTTTTCCCCGCTGAGGTCTACCCCGACCTCTCGGTACGAGACGATTTGAGAGCCGACCTTAAATCACCCCACTAG

7990

PRKN

PRKN-202

TCAGCTCATTGCAACCTCAAGTGATTCTCCTGCCTCAGCCGGGCTCAAGCGATTTCTGCCTCAGCCTCTCGAGTAGCTAGGATT
AGTCGAGTAACGTTGGAGTTCACCTAAGAGGACGGAGTCGGCCCCGAGTTCGCTAAAGGACGGAGTCGGAGAGCTCATCGATCCTAA

8075

PRKN

PRKN-202

ACAGTCATGTGCCGTCATGCCCGGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTTGCCACATTGGCCAGGCTGGTCTCGAAC
TGTCAGTACACGGCAGTACGGGCCGATTAAAAACATAAAAAATCATCTCTACCCCAAAGCGGTGTAACCGGTCCGACCAAGAGCTTG

8160

PRKN

PRKN-202

TCCTGACCCCAAGGTGATCCGCCCCCTCAACCTCCCAAAGTGCTGGGATTACAGGCGCGAGCCAACGCGCCGGGCTCTGCTGCA
AGGACTGGGGTCCACTAGGCGGGCGGAGTTGGAGGGTTTTACGACCTAATGTCCGCGCTCGGTTGCGCGGCCCGGAGACGACGT

8245

PRKN

PRKN-202

PCR Forward

tgtgtacttgtgtggctatttacag

CTTCTGTGTCTACCAGGAGTCCATGTGTACTTGTGTGGCTATTTACAGTAGGGCTCTCTCAATTCCTGACTCCGCTAAATGACTA
GAAGACACAGATGGTCTCAGGTACACATGAACACACCGATAAATGTCATCCCGAGAGAGTTAAGGACTGAGGCGATTTACTGAT

8330

PRKN

PRKN-202

ACCATGTAGTGATACTGGAGAAAAAGCACTGGATTTCCCTGCGGGGAGCTTGGGTTACTTCTTGGCTTCACCTCTTACTGTTTGA
TGGTACATCACTATGACCTCTTTTTCGTGACCTAAAGGGACGCCCTCGAACC CAATGAAGAACC GAAGTGGAGAATGACAACT

8415

PRKN

PRKN-202

CCCGTGGGCACCTCATTTCATGGCTTCACGTCTCCCTTTCTCATTAGTGAGAGGGCTTCCCTCCACCTCCACATCGTGTGATTCT
GGGCACCCGTGGAGTAAAGTACCGAAGTGCAGAGGGAAAGGAGTAATCACTCTCCGAAGGAGGGTGGAGGTGTAGCACACTAAGA

8500

PRKN

PRKN-202

TCTAGACTCACTTATTATCATCGAGGGGCATGGCTTAAAGAAGGTCACAGCGTATTTCTCCAGCTCCCTCGCTTAAAGAGCAAAA
AGATCTGAGTGAATAATAGTAGCTCCCCGTACCGAATTTCTTCCAGTGTGCGATAAAGAGGGTCGAGGGAGCGAATTTCTCGTTTT

8585

PRKN

PRKN-202

GAATAGCAGAGACTCAGGGCCCTTCTAAAACAGAATTGTTGACCACTTTGGCACAAAGGTCATCCGTTCTGGGAAAGGTTTGATG
CTTATCGTCTCTGAGTCCCGGGAAGATTTGTCTTAACAACCTGGTGAAACCGTGTTCAGTAGGCAAGGACCTTTCCAAACTAC

8670

PRKN

PRKN-202

CTGATTTATTTCCATCTCACACCTCGTAACAGATTTCTTCTCTTGTCCAAAGAGATTGTTTACTGTGGAAACATTTAGAGGAAAA
GACTAAATAAAGGTAGAGTGTGGAGCATTGTCTAAAGAAGAGAACAGGTTTCTCTAACAAATGACACCTTTGTAAATCTCCTTTT

8755

PRKN

PRKN-202

ATGAGCAGCCGGGATCCATGTGTGTGATCATATTTATCTTTCTTTTCAGGAATTTTCTTTAAATGTGGAGCACACCCACCTCTG
TACTCGTCGGCCCTAGGTACACACACTAGTATAAATAGAAAGAAAGTCCTTAAAAAGAAATTTACACCTCGTGTGGGGTGGAGAC

8840

PRKN

PRKN-202

E F F F K C G A H P T S
ENSE00002151207
PRKN-202

gRNA Protospacer

GCATTA T GTGCACAGACGTC

ACAAGGAAACATCAGTAGCTTTGCACCTGATCGCAACAAATAGTCGGAACATCACTTGCATTA GTGCACAGACGTCAGGTAAGG
TGTTCCCTTTGTAGTCATCGAAACGTGGACTAGCGTTGTTTATCAGCCTTGTAGTGAACGTAAT G CACGTGTCTGCAGTCCATTCC

8925

PRKN

PRKN-202

D K E T S V A L H L I A T N S R N I T C I T C T D V R
ENSE00002151207
PRKN-202

Donor Template SNV -> Rev

gRNA Protospacer Sequence

PAM

SNV

TATCAGCCTTGTAGTGAACGTAATGCACGTGTCTGCAGTCCattcc
Donor Template SNV -> Rev

TATCAGCCTTGTAGTGAACGTAATGCACGTGTCTGCAGTCCattccctagatTTTTATCACAGTGAAGGGAGGTGCCTGCac tccattcc

Donor Template SNV -> Rev

ATCTAAAAATAGTGTCACTTCCCTCCACGGACGTGAGGTAAGGATCTAAAAATAGCATCACTCCCCCTCCTTACTTTCCCAATA
TAGATTTTTATCACAGTGAAGGGAGGTGCCTGCACTCCATTCTAGATTTTTATCGTAGTGAGGGGGGAGGAATGAAAGGGTTAT

9010

PRKN

PRKN-202

Donor Template SNV -> Rev

tagatTTTTATCACAGTGAAGGGAGGTGCCTGCACTCCATTCTAGATTTTTAT

Donor Template SNV -> Rev

tagatTTTTAT

Donor Template SNV -> Rev

TTGTTCTGCCACACGAGCCTTCCCTCAGTGAACCTCTCTTTCTGGGGAGTGTCTGCTTTATTTTTGATGCGTCTGCCCAATTTGGGT
AACAAAGACGGTGTGCTCGGAAGGAGTCACTTGAGAGAAAAGGACCCCTCACAGACGAAATAAACTACGCAGACGGGTTAAACCCA

9095

PRKN

PRKN-202

cgaaataaaactacgcagacg

Sanger Sequencing Primer

ATATTTAATGTGAGGAAACAATTTAAAATGCCAGTGAACCTTAGTTTAAAGTAGGTAAATAGGGTCTAAGATGGGAGATGGCATAT
TATAAAATTACACTCCTTTGTTAAATTTTACGGTCACTGAATCAAATTCATCCATTTATCCCAGGATTCTACCCTCTACCGTATA

9180

PRKN

PRKN-202

ccatttatcccaggattctaccctc

PCR Reverse

CTAAAAATAGTGTATGTAATCTTAGTTGATATTTAAAATATAAGCTCACATATTTGAGTATAAAATGTAAACTCATCCATTAAGTTC
GATTTTATCACATACATTAGAATCAACTATAATTTTATATTTCGAGTGTATAAACTCATATTTTACATTTGAGTAGGTAATTCAAG

9265

PRKN

PRKN-202

CAAAATAAAATTTAAAATATGGTGCTAACATTTAAAATGTTAACATTAGGCATGTGCCACCACACCCAGCTAATTTTTTTGTATTTG
GTTTTATTTTAAATTTTATACCACGATTGTAAATTTTACAATTGTAATCCGTACACGGTGGTGTGGGTCGATTAAAAAACATAAAC

9350

PRKN

PRKN-202

TAGTAGAGACAGGGTTTTCCCATGTTGGCCAGGCTGGTCTTGAACCTCCTGACCTCAGGTGATCTGCCACCTCAGCCTCCCAAAG
ATCATCTCTGTCCCAAAGGGGTACAACCGGTCCGACCAGAACTTGAGGACTGGAGTCCACTAGACGGGTGGAGTCGGAGGGTTTC

9435

PRKN

PRKN-202

TGCTGGGATTACAGGCGTGAGCCACTGCACCCGGCCAGGAATGGAAAAAAAATTTATGAACACCACAACATGTAGCCCATACATT
ACGACCCTAATGTCCGCACTCGGTGACGTGGGCCGGTCTTACCTTTTTTTTTAAATACTTGTGGTGTGTGACATCGGGTATGTAA

9520

PRKN

PRKN-202

TTATTTTTAAAATGTCTTTTCCATACATTTTCACTTCTCCATATTTGCCTATATTTATGCTGAGGCTTCGCACACATTCATGCACT
AATAAAAATTTTACAGAAAAGGTATGTAAAGTCAAGAGGTATAAACGGATATAAAATACGACTCCGAAGCGTGTGTAAGTACGTGA

9605

PRKN

PRKN-202

CAAAATGAAAGCAAGTAGCTAGTTTTGGGACCTTGTATTCTAATCCAGTGAACACAAGAAAAGCAAGCAAATGTGGAGATGGC
GTTTTACTTTTCGTTTCATCGATCAAACCCTGGAACAATAAAGATTAGGGTCACTTGTGTTCTTTTCGTTTCGTTTACACCTCTACCG

9690

PRKN

PRKN-202

CTGTTAGTAAAAAAGGGAAAACGACTCAATACGAATTGCGGTGTAGGAGCCAAGGACAAAGTGAAGAAACTGAGTCTGTTTTGC
GACAATCATTTTTTCCCTTTTGCTGAGTTATGCTTAACGCCACATCCTCGGTTCTGTTTCACCTTCTTTGACTCAGACAAACG

9775

PRKN

PRKN-202

TCTGCAGAGTAGGCAATTCAGAGTACAATTCCTTACTCTACACTTTCCGAATGGACAGAGAAAAGAAATTAGCTTCGTTACATGT
AGACGTCTCATCCGTTAAGTCTCATGTTAAGGAATGAGATGTGAAAGGCTTACCTGTCTCTTTTCTTTAATCGAAGCAATGTACA

9860

PRKN

PRKN-202

TCTTTGAAGTTGGCTAAGAAGCTCAAATTGCAATAGTGAGAACTTAGCCCTCATATCAGGAAGAACTCTTTTTTTTTTTTTTTTT
AGAAACTTCAACCGATTCTTCGAGTTTAACGTTATCACTCTTGAATCGGGAGTATAGTCCTTCTTGAGAAAAAAAAAAAAAAAA

9945

PRKN

PRKN-202

TGAGAAGGAGTTTCGCTCTTGTGCTCAGGCTGGAGTGCAATGGCGGGATCTCGGCTCACTGCAACCTCCGCCTCCAGGTTCAA
ACTCTTCTCAAAGCGGAGAACAACGAGTCCGACCTCACGTTACCGCCCTAGAGCCGAGTGACGTTGGAGGCGGAGGGTCCAAGTT

10,030

PRKN

PRKN-202

GGGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCATGCGCCACCACACCAGGCTTATTTTGTATTTTGTAGTAGAG
CCCTAAGAGGACGGAGTCGGAGGGCTCATCGACCCTAATGTCCGTACGCGGTGGTGTGGTCCGAATAAAACATAAAAATCATCTC

10,115

PRKN

PRKN-202

ACGGGGGTTTTCTTCATATTGGTCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCCGCCCGCCTTAGCCCCACCAAGTGCTGGG
TGCCCCAAAGAAGTATAACCAGTCCGACCAGAGCTTGAGGACTGGAGTCCACTAGGCGGGCGGAATCGGGGTGGTTTCACGACCC

10,200

PRKN

PRKN-202

ATTACAGGCGTGAGCTGCCGCACCCAGCCAGAAAAGAACTTTTTAATGAAATGCCAAAATGAATTAATGAATAAAGTCAAAGAAT
TAATGTCCGCACTCGACGGCGTGGGTGCGGCTCTTCTTGAAAAATTACTTTACGGTTTTACTTAATTACTTATTTTCAGTTTTCTTA

10,285

PRKN

PRKN-202

CTATTGTTTCAGACTTTTAAGCAAAAATAGTCATATACCCTAATCATTTTAAGTGTGTCTCTCTCTGGCTTTTGGAACTGTATT
GATAACAAAGTCTGAAAATTCGTTTTTATCAGTATATGGGATTAGTAAAATTCACAACAGAGAGAGACCGAAAACCTTGACATAA

10,370

PRKN

PRKN-202

AGATGGTCTTTTAAAGTTGCTTTAAACTCTGTGATTTTCGTGATAAGCAAATATTCACACTCCTATCAGGCTATTTCTATTCTCTA
TCTACCAGAAAATTTCAACGAAAATTTGAGACACTAAAGCACTATTTCGTTTATAAGTGTGAGGATAGTCCGATAAAGATAAGAGAT

10,455

PRKN

PRKN-202

ATAAATTTAAATTTAAATGTTGATTAATAGAAAGCCCAAAAACCTTAACAGCATCTGTTGAACAAAACCTGTTTCCAAGAAGGAATA
TATTTAATTTTAAATTTTACAACCTAATTATCTTCGGGTTTTTGGAAATTGTCGTAGACAACCTTGTGGACAAAAGGTTCTTCTTAT

10,540

PRKN

PRKN-202

AAAATGAGACGTGATTTTCTCTTTGCTGTCATGTTTAGTCACTGCTGTGGCAGGAAGCACCACAACATTGCCTTTAAAATATAGCG
TTTTACTCTGCACTAAAAGAGAAAACGACGTACAAATCAGTGACGACACCGTCCTTCGTGGTGTGTAACGGAAATTTTATATCGC

10,625

PRKN

PRKN-202

CTTCAGCCTCTCTTGGCAAGGTGAATGACTGTGTATGGCTAACGCTTTCAACATGCAAGAAGAACAGCTAAGATGGGGATTCTGG
GAAGTCGGAGAGAACCGTTCCTACTTACTGACACATACCGATTGCGAAAGTTGTACGTTCTTCTTGTGCGATTCTACCCCTAAGACC

10,710

PRKN

PRKN-202

TGTTTCGGGAAAAGGGATTGAAAAGTGCTAAAAGCGAGGGCTTGACTGCGCTGATAGCAGCAGGTAATTTAAGTCACTGTTTCAGTT
ACAAAGCCCTTTCCCTAACTTTTACGATTTTCGCTCCCGAACCTGACGCGACTATCGTCGTCCATTAAATTCAGTGACAAGTCAA

10,795

PRKN

PRKN-202

TTTCAAAGGAAAAATTCAAAATACTCTTCTGTAAGTCAGAAAACAGCTCATCAGCCAGTATTTTAACTTTCCATTAAGGTTGGT
AAAGTTTTCTTTTTAAGTTTTATGAGAAGACATTCAGTCTTTTGTGAGTAGTCGGTCATAAAATTTGAAAGGTAATTTCAAACCA

10,880

PRKN

PRKN-202

AAACATGACATTTAAATATGTGGTGATGATGGTATTATCTTACTAAGAGCGTTGCCCTCCCCGTTTCTGCTGTTATGCTGTCAC
TTTGTACTGTAATTTTATACACCACTACTACCATAATAGAATGATTCTCGCAACGGGAGGGGCAAAGGACGACAATACGACAGTG

10,965

PRKN

PRKN-202

TTTCGTATTAATAACTGGCAACATCTTTCGAAGAGAATGAGCCACTTACTTCCCAGATACACAGGGTGATAATTGCTGGAAAAAT
AAAGCATAATTATTGACCGTTGTAGAAAAGCTTCTTACTCGGTGAATGAAGGGTCTATGTGTCCCACTATTAACGACCTTTTTTA

11,050

PRKN

PRKN-202

AATATTGTCACATTAATTTTGTTCATATGATTGCCTTTGGGAGAAATTTATAAATAGAAGCGACTATATCCAGATGCATCTTAAGG
TTATAACAGTGTAATTTAAAACAAGTATACTAACGGAAACCTCTTAAATATTTATCTTCGCTGATATAGGTCTACGTAGAATTCC

11,135

PRKN

PRKN-202

GTGTGTGTATATAACCAACCACTTGATTGAATAAGGTCCCTTCTCGTGAAGGCAGCCAAGTGCCCCATATGTAAGAAAAGAGAGA
CACACACATATATTGGTTGGTGAACCTAATTATTCCAGGGAAAGAGCACATTCGTCGGTTCACGGGGTATACATTCTTTCTCTCT

11,220

PRKN

PRKN-202

AGAACTCTTTCTTCTGACTTCGAGGGATCCACGTGTAAGGACATTATGAGCGCCTGCACGGACACTCCGTGCAGTTTTGGTGATCA
TCTTGAGAAAAGAACTGAAGCTCCCTAGGTGCACATTCCTGTAATACTCGCGGACGTGCCTGTGAGGCACGTCAAACCACTAGT

11,305

PRKN

PRKN-202



TCTCAAAAAAAAAAAAAAAAAATGAAAATCATAATAAATTTTCTCTGCCATGAAAACAGTTTTTTTAAAAATAGGTACCTAAAAATTCGGT
AGAGTTTTTTTTTATTTTTTACTTTTTAGTATTATTTAAAAGAGACGGTACTTTTTGTCAAAAAATTTTTATCCATGGATTTTTAAGGCA

12,240

PRKN

PRKN-202

TATGTGGGGATATGCTGTTGTAGGACTTTCTCCTTAGTTTCAGCTAAAAACAGAGTCCTTGTACACAACCATGAAAAATTAGGCC
ATACACCCCTATACGACAACATCCTGAAAAGAGGAATCAAGTCGATTTTTGTCTCAGGAACAGTGTGTTGGTACTTTTTAATCCGG

12,325

PRKN

PRKN-202

CGCAGACTCTTTGAAGGGTGAGAAAAATGGAATTTATTGGGCAAAAAGGAAAAGAAAAGGGTAACAGGGACTCTCAGCAAAGCA
GCGTCTGAGAAACTTCCCACTCTTTTTACCTTAAATAACCCGTTTTTCTTTTTCTTTTTCCCATTTGTCCCTGAGAGTCGTTTTCGT

12,410

PRKN

PRKN-202

AGATGAATATAGATGAAAATCTATAAGGCAAAAATGAATATGGATTAATAATAGATGAAAATCAGAGTATAGTATTAATTTATC
TCTACTTATATCTACTTTTTAGATATTCCGTTTTACTTATACCTAATTTTTATTATCTACTTTTAGTCTCATATCATAATTAATAG

12,495

PRKN

PRKN-202

TGTAAATATAGTTTCTGTGAACTCCTTATCATACTGGAAAATAAAAAGTAAAATATTAAGCCTCCAAGTACTGAAACAGACTCCCT
ACATTTATATCAAAGACACTTGAGGAATAGTATGACCTTTTTATTTTCATTTTATAATTCGGAGGTTGACTGACTTGTCTGAGGGA

12,580

PRKN

PRKN-202

CCTGGTCAGGGGGACCGTGGAGACACCTTGAAGCTGAGTTCCAGCCATGATGGGGTGAGAGGTCAGACAGGCCTGTTATGCCAA
GGACCAGTCCCCCTGGCACCTCTGTGGAACCTTCGACTCAAGGTCGGTACTACCCCACTCTCCAGTCTGTCCGGACAATACGGTT

12,665

PRKN

PRKN-202

CGCCCTCACTAACCACCTCTAGGTTTTCTTTTCTAAGGGCTAAACAGAAACCAGGCAGGTTTTCCACCTCACCAGCTGAAATCC
GCGGGAGTGATTGGTGGAGATCCAAAGGAAAGGATTCCCGATTTGTCTTTGGTCCGTCCAAAAGGGTGGAGTGGTTCGACTTTAGG

12,750

PRKN

PRKN-202

CAGGTACTACCCAGATCAGGAGAGGCCAGGCTCCTCCCCACCCAAACAGCATGAACTTCCCAAGGCTCCATCCCTTTCTCCCAG
GTCCATGATGGGTCTAGTCCTCTCCGGTCCGAGGAGGGGTGGGGTTTTGTCTGACTTTGAAGGGTTCCGAGGTAGGGAAAGAGGGTC

12,835

PRKN

PRKN-202

TGCACAGGCTGGTCACTTTCTCCGGGTACCCCTTGGGTACCTTGGCTGTCTCAGTTCTATTTAACCATTTCCCACTTTTGAGC
ACGTGTCCGACCAGTGAAAAGAGGGCCATGGGGGAACCCATGGAACCGACAGAGTCAAGATAAATTGGTAAAGGGGTGAAAACCTCG

12,920

PRKN

PRKN-202

ATTTACTCACAGTTAAAAAAAAAAAAAAAAACAAATAAGACTGAAAACCATATTTATTTTACAGACATCATTGACTGCATGCCTT
TAAATGAGTGTCAATTTTTTTTTTTTTTTTTTTTGTATTCTGACTTTTGGTATAATAAAATGTCTGTAGTAACTGACGTACGGAA

13,005

PRKN

PRKN-202

GGCTCTAAGAATACGGTCATAACAGTGATTGCAGGTCCACGGTAATGGACATTTTTGAGGTTCTTGATCCATATTGTCACCTTCC
CCGAGATTCTTATGCCAGTATTGTCACTAACGTCCAGGTGCCATTACCTGTAAAAACTCCAAGAAGTGGTATAACAGTGGAAGG

13,090

PRKN

PRKN-202

TTTCCAGAAACACTGCTCTAGTTCTGATCTGGCTTCCCATGTTTGAGAGGGCTCCCTCCTGCCTCTCTTTTCAGCATAATTTTTGT
AAAGGTCTTTGTGACGAGATCAAGACTAGACCGAAGGGTACAAACTCTCCCGAGGGGAGGACGGAGAGAAAAGTCGTATTA AAAACA

13,175

PRKN

PRKN-202

CTTTGCCTATTTGATAAAGGAGATTTTTTATTATTTTGTATTTTATGAATACAAGAATTTCTCACTGGCTTATTTGCATTTTTAT
GAAACGGATAAACTATTTCTCTAAAAAATAATAAAACAATAAATACTTATGTTCTTAAAGAGTGACCGAATAAACGTAAAAATA

13,260

PRKN

PRKN-202

TGTGAGAGAACAATGTGAAACTTTCTCCATATGAAAGCTATACAAAAAGTCTACAAAACAGATCTGGTTTTAGCAATTGCTTTCT
ACACTCTCTTGTTACACTTTGAAAGAGGTATACTTTTCGATATGTTTTTCAGATGTTTTGTCTAGACCAAAGTCGTTAACGAAAGA

13,345

PRKN

PRKN-202

CATTCACTATTCATAATATCACGGTGTCTTTATAAATATACAGTTTACTGTCTTTTGAATTTATGTTTAAATATGTTGCTTTGG
GTAAGTGATAAGTATTATAGTGCCACAGGAAATATTTATATGTCAAATGACAGAAAACCTTAAATACAAAATTTATACAACGAAACC

13,430

PRKN

PRKN-202

TCTTTATTTTAAAAATATTATATTTTCTGGAGATAAATCAAATTCATAATTACAGACTTAAAAATAAAAGGGTGTTTTAAATCTA
AGAAAATAAAATTTTATAATATAAAAGGACCTCTATTTAGTTTAAAGTATTAATGTCTGAATTTTTATTTTCCACAAAATTTAGAT

13,515

PRKN

PRKN-202

TTTTTTATTCTTATAATTGTTTTACTTATGTGTATATATATGTATTAATCATACATCATTAATCAAATTAGACATAAATTAACCAC
AAAAAATAAGAATATTAACAAAATGAATACACATATATACATAATTAGTATGTAGTAATTAGTTTAACTGTATTAATTGGTG

13,600

PRKN

PRKN-202

ATAATAGATGAAAATCGGAGGATAGTATTAATTTATCTGTAAATATAGTTTTCTGCGTACTCCTTATACTGAGAAAATAAAAAATAA
TATTATCTACTTTTAGCCTCCTATCATAATTAATAGACATTTATATCAAAGACGCATGAGGAATATGACTCTTTATTTTTATTT

13,685

PRKN

PRKN-202

ATTGTAAGCCTCCAACCTGACTGAACAGAATCCCTCCTTGTCAGGGGACCGTGGAGACACCTTGGAAAGCTGAGTTCCAGCCATGA
TAACATTCGGAGGTTGACTGACTTGTCTTAGGGAGGAACAGTTCCCTGGCACCTCTGTGGAACCTTCGACTCAAGGTCGGTACT

13,770

PRKN

PRKN-202

TGGGGTGGGAGGTCAGACAGGCCTGTCATGTCCCCACCCTCACTAACCACCTCTAGGCTTCTTCCCTAAGGGCTAAACAGAAAC
ACCCACCCCTCCAGTCTGTCCGGACAGTACAGGGGTGGGAGTGATTGGTGGAGATCCGAAGGAAGGGATTCCCGATTTGTCTTTG

13,855

PRKN

PRKN-202

CAGGCCTTCGAAAAGACTCTACACTGAGGCTGGGCATGGTGAGTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGTGCA
GTCCGGAAGCTTTTCTGAGATGTGACTCCGACCCGTACCACTCAGTGCGGACATTAGGGTCGTGAAACCCTCCGACTCCACACGT

13,940

PRKN

PRKN-202

GATCACTTGAGGCCAGGAGTTTGGAGAGCAGCCATGGCCAACATGGGGAAATCCCATCTCTACTAATAATACAAAAAAAAAAAAAA
CTAGTGAACCTCCGGTCCCTCAAACCTCTCGTCGGTACCGGTTGTACCCCTTTAGGGTAGAGATGATTATTATGTTTTTTTTTTTTTTT

14,025

PRKN

PRKN-202

AAAAAAAAATTAGCCAGGCATGGTGGCGCGCGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGATAATCGCTTGAACCCGGG
TTTTTTTTAATCGGTCCGTACCACCGCGCGCGGACATTAGGGTCGATGAGCCCTCCGACTCCGTCTATTAGCGAACTTGGGCC

14,110

PRKN

PRKN-202

AGGCGGAAGTTGCACTGAGGCGTGATCACACCACTGCACTCCAGCCTGGGTGACAGAGTGAAACTGTGTCTCAAAGAAAAAAAA
TCCGCCTTCAACGTGACTCCGCACTAGTGTGGTGACGTGAGGTCGGACCCACTGTCTCACTTTGACACAGAGTTTTCTTTTTTTT

14,195

PRKN

PRKN-202

GGCCCCACACTGATAATGTCCATCACTGGCTTATATCTTCCAGGTACAGAATAAAGGCAAGATAAGATAAATCAGTCCTTCACC
CCGGGGTGTGACTATTACAGGTAGTGACCGAATATAGAAGGGTCCATGTCTTATTTCCGTTCTATTCTATTTAGTCAGGAAGTGG

14,280

PRKN

PRKN-202

CTCCCTGAGACAGCTGTTTCTCTATTCTGATTTTCTTTAAATGTTTACCTTATCTTATGTAAAATGTAGGTTTACTGGGCACTA
GAGGGACTCTGTGACAAAAGGAGATAAAGACTAAAAGAAATTTACAAGTGAATAGAATACATTTTACATCCAAATGACCCGTGAT

14,365

PRKN

PRKN-202

TCTAAAGGCTCACAAGTATATAATCATCACAAGTATGTCTCATTGCCTCCCCCTTTAAGGAAAATGCATAAATGCTAAATCTCC
AGATTTCCGAGTGTTTCATATATTAGTAGTGTTCATACAGAGTAACGGAGGGGGAAAATTCCTTTTACGTATTTACGATTTAGAGG

14,450

PRKN

PRKN-202

TGAGAACCTCTTAGGGAAAAAGCAGCCACAAAGGTAGCTGTGACTTGGGTTTTTCCAGGCATGCTCTCAAGCTGGAATAATAGA
ACTCTTGGAGAATCCCTTTTTCGTCGGTGTTCATCGACACTGAACCCAAAAGGGTCCGTACGAGAGTTCGACCTTATTATCT

14,535

PRKN

PRKN-202

CCTTGATGACGGAGCCTTCTGCCTCAGTCACTCATTTTCGGTTGTCAGTACTAATGAAAGTAAGAATTTTATGTTTTTGTGCTTTA
GGAACACTGCCTCGGAAGACGGAGTCAGTGAGTAAAGCCAACAGTCATGATTACTTTTCATTCTTAAAAATACAAAAACACGAAAT

14,620

PRKN

PRKN-202

CAAATATACTTCTATATAGTAAGAGACTGATAACTCTTTTCAATTTACCTTTTTAATAATAATTCAAGTGCTCTAATGCCACAAAGC
GTTTATATGAAGATATATCATTCTCTGACTATTGAGAAAAGTAAATGGAAAAATTATTATTAAGTTCACGAGATTACGGTGTTCG

14,705

PRKN

PRKN-202

TAAC TTT TTT GAC CTT AAG AGA AT ACC CACA AT TTT CTT TGG CCT TTT GGT TTT CCG TGT AAA AT CCA GGA TTT TAA GTAG GT CAT CT CC
ATT GAAAA ACT GGA ATT CTCT TAT GGT GTT AAA GAAA ACC GGA AAC CAA AGG CAC AT TTT TAG GT CCT AAA AT TCA TCC AGT AG AGG

14,790

PRKN

PRKN-202

AAG GCT CTG ACT GGT TCT AAG GACT GCAG GAG GGAG GAATA AAG ACT TCT TCAT AGCT TATA AATT GATT GAG ACAG TTG CAAAA
TTCC GAG ACT GAC CAAG ATT CCT GAC GT CCT CCCT CCT ATT TCT GAAGA AGT ATCGA ATAT TTA ACT AACT CTGT CAAC GTTTTT

14,875

PRKN

PRKN-202

TACT TGT ATTTAG TTCT GTCT GTT GAC AAA TGCAG AAA TCAA GATGA AGTCT GCAATGAT GCG CCTAC CAAATCAC ATATAT GT
ATGA ACATA AATCAAG ACAG ACA ACTG TTTAC GTCTTTAG TTTCTACT TCAGAC GTTACTAC GCGGATGG TTTAGTGTATATACA

14,960

PRKN

PRKN-202

TGTA ACATGTAG GCCGATGTATAAGAGACATGTGTGACTCATGGCCAGATTTTAGGTTTACAGTTTAATTCAGGTACATGATTTG
ACATTGTACATCCGGCTACATATTCTCTGTACACACTGAGTACCGGTCTAAAATCCAAATGTCAAATTAAGTCCATGTACTAAAC

15,045

PRKN

PRKN-202

TGTCCTTTGAGTTTACATTTGACATAAAAATATTTTACTCTTTCTTAGGCCGGGCGCAGTGGCTCACGCCTGTAATCCCAGCACCT
ACAGGAAA CTCAAATGTAAACTGTATTTTATAAAAATGAGAAA GAATCCGGCCCCGCTCACCGAGTGC GGACATTAGGGTCTGTGGA

15,130

PRKN

PRKN-202

TGGGAGGCTGAGGTGGGCAGATCACGAGGTCAGGAGTTTCGAGACCAGCCTGGCCAACATAGTGAAACCCCATCTCTACTAAAAAT
ACCCTCCGACTCCACCCGTCTAGTGCTCCAGTCTCAAGCTCTGGTCCGACCGGTTGTATCACTTTGGGGTAGAGATGATTTTTTA

15,215

PRKN

PRKN-202

ACAAAAATTAGCTGGGAGTGGTGGTGTGCACCTGTAGTCCCACCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAATCCAGGA
TGTTTTTAATCGACCCTCACCACCACACGTGGACATCAGGGTGGATGAACCCCTCCGACTCCGTCTCTTAGCGAACTTAGGTCTCT

15,300

PRKN

PRKN-202

GGCAGAGGTTGTGGTGAGCCAAGATCGTGCCACTGCACTCTAGCCTGGGCAACAAAGCGAGACTCCGTCTCAAAAACAAAACAAACA
CCGTCTCCAACACC ACTCGGTTCTAGCACGGTGACGTGAGATCGGACCCGTTGTTTCGCTCTGAGGCAGAGTTTTGTTTGTGTTGT

15,385

PRKN

PRKN-202

AACAAACAAAATATTTTACTCTTTCTTAAGGGAAAAAGTGA ACTATCTGGGAACCAGAAATGTCCTGAGGTTTTTTGTGAAGCTGC
TTGTTTGTGTTTTATAAAAATGAGAAA GAATTCCTTTTTTCACTTGATAGACCCTTGGTCTTACAGGACTCCAAAAACACTTCGACG

15,470

PRKN

PRKN-202

AGGTTCCCTTCTGGCCATCAAGCCTTGTGTTCTCCTCTCCTTACCAACAGTAGTGACTTGCTCTTACCCTTCAGGGTTGTCAGT
TCCAAGGGAAAGACCGGTAGTTCCGGAACACAAGAGGAGAGGAATGGTTGTCACTGAACGAGAAGTGGGAAAGTCCCAACAGTCA

15,555

PRKN

PRKN-202

TGATAGTTTTGAGGTTTATGAATATAAAGCATAACAAGCTGAACAAAAAGCAAGAAGCTGGATTAAGCACAGTAAGTCTAGCACTTGA
ACTATCAAACCTCCAAATACTTATATTCGTATTGTTTCGACTTGTTTTTCGTTCTTGACCTAATTCGTGTCATTTCAGATCGTGAACCT

15,640

PRKN

PRKN-202

AGGCAAAATAGCTGCCTTGTAGTCTTTCCAATAGAAGTTACAACAGAAGGTTTCAGGACTTTTTTGGGTGCCTAAGTCATATAA
TCCGTTTTATCGACGGAACAAATCAGAAAAGGTTATCTTCAATGTTGTCTTCCAAGTCTGAAAAAACCCACGGATTTCAGTATATT

15,725

PRKN

PRKN-202

AAATGGCACAGGTAAGCCAAAGGGATACCGGAATTCCTTCCCTAGCCAGCATGTGTGTCTTGGGGCTCACCCCTCTGTCAGTGTCT
TTTACCGTGTCCATTTCGGTTTCCCTATGGCCTTAAGAAAAGGATCGGTTCGTACACACAGAACCCTCGAGTGGGAGACAGTTCACAGA

15,810

PRKN

PRKN-202

CCCAAACGAAATTGATATTTCTGCTCCTTCAATCTCCCTTTACAGTGCCAGTTTTCTAAATTTTTTAAAGGGTAAAAATTGAAAA
GGGTTTGCTTTAACTATAAAGACGAGGAAGTTAGAGGGAAATGTCACGGTCAAAAAGATTTAAAAAATTTCCCATTTTTAACTTTT

15,895

PRKN

PRKN-202

CATACAAAATAGAAAAATCCTTATCAAGATATTGAGGACTAAACTCTGATTTTTTTTATCATACCCAAATTTCTATCTAAGGAGT
GTATGTTTTATCTTTTTAGGAATAGTTCTATAACTCCTGATTTGAGACTAAAAAAATAGTATGGGTTTTAAAGATAGATTCCTCA

15,980

PRKN

PRKN-202

CTGGGGAGTCATGCCCTACAATTCGTATATTCTCATCAGATAGGTTTTATTTAACCCATTTTATTGTGACTACTTTCCAACTGA
GACCCCTCAGTACGGGATGTTAAGCATATAAAGAGTAGTCTATCCAAAATAAATTGGGATAAATAACACTGATGAAAGGTTTACT

16,065

PRKN

PRKN-202

CTTCGGGATAACATTATGAGACAAGGAAGAAAAACAAAATATTTTAGCCCAAACATGTTTCTTTGCTGTATCTTGAAATGGCCC
GAAGCCCTATTGTAATACTCTGTTCTTTCTTTTTGTTTTATAAAATCGGGTTTTGTACAAAGAAACGACATAGAACTTTACCGGG

16,150

PRKN

PRKN-202

TACAAAGCTGTCTTTGTGGGGGAAAAATTTGCATCTGTTTATAGCTAGCTAGATATTTTTCTATCTAGATAACATAGCTAGATAT
ATGTTTCGACAGGAAACACCCCTTTTAAACGTAGACAAATATCGATCGATCTATAAAAAGATAGATCTATTGTATCGATCTATA

16,235

PRKN

PRKN-202

TTTTCTTCCAGGCCCTCCCAATCCTAAAGAGATTAACATAAAATCTAGCACTTTTTAAAGATCTGAATAGGAGACATTTGTCTCT
AAAAGAAGGTCCGGGAGGGTTAGGATTTCTCTAATTGATTTTTAGATCGTGAAAAATTTCTAGACTTATCTCTGTAAACAGGAG

16,320

PRKN

PRKN-202

TATTGTCTCTAAGGGTAGCCATTATAAGACCTCAGAAGAACCTTGGTCTCCACAGTCTTTTGTCTTAACTGAACATTCCCTTTC
ATAACAGAGATTCCCATCGGTAATATTCTGGAGTCTTCTTGAACACAGAGGTGTCAGAAAAACAGAATTGGACTTGTAAAGGGAAAG

16,405

PRKN

PRKN-202

TATCCCTCCCAGGTCTTTAGACAAACTCAACCAAATGTCAACCAGGGAAGTGTTTAAATTTACCTATAGGCTGGAAGCCCCCAGC
ATAGGGAGGGTCCAGAAATCTGTTTGGATTGGTTTACAGTTGGTCCCTTACAAATTTAAATGGATATCCGACCTTCGGGGGTCG
PRKN
PRKN-202

16,490

TTTGAGTTGTCCACCTTTCTCGACCAAATAATGTATTTCTTAAATGTGTTTGGATTGATGTCTCATGCCTCCTTAACATGTATA
AAACTCAACAGGGTGGAAAAGAGCTGGTTTGGATTACATAAAGAATTTACACAAACTAACTACAGAGTACGGAGGAATTGTACATAT
PRKN
PRKN-202

16,575

AAACCAAGCTGTGCCCCAGCCACCTTGGGTATGTTCTCAGGACCTCCTGAGGGCTGTGTCATGGACCATTGTCACTCATATTTGG
TTTGGTTCGACACGGGGTCGGTGAACCCATACAAGAGTCTCGGAGGACTCCCGACACAGTACCTGGTAACAGTGAGTATAAACC
PRKN
PRKN-202

16,660

CTCAAAATAAATCTCTTTAAATATTTTACAGAGTTTGACTCTTTTTCATCGATAGAAGGCAGCTAGTGAATCTCTGTATGTTATCT
GAGTTTTATTTAGAGAAATTTATAAAATGTCTCAAAGTGAAGAAAGTAGCTATCTTCCGTCGATCACTTAGAGACATACAATAGA
PRKN
PRKN-202

16,745

CACCTTTAATCATTATTCCTTAGTTTTCAAAGCTGAAGCAGACCGAAAAATAGCCCGATTTGCTTAGTCGGAAATTAACCTTCGA
GTGGAAATTAGTAATAAGGAATCAAAGTTTTCGACTTCGTCTGGCTTTTTATCGGGCTAAACGAATCAGCCTTTAATTGGAAGCT
PRKN
PRKN-202

16,830

GACACATGTTTGAACCCAGGTCCCTGTTGGGCATTAAATTTAAAAATCTGTTCTACCATGTTATTTCCCTCAACCCTTCCAAT
CTGTGTACAAACTTTTGGGTCCAGGGACAACCCGTAATTTAAATTTTGTAGACAAGATGGTACAATAAAGGGAGTTGGGAAGGTTA
PRKN
PRKN-202

16,915

AAAGACTTATGTTTTGATGTCATTGTTGTTTGGATATAAATGGTTTCATAATTGCCTTCAAATTTGTCCTAAAATAAAATTCATT
TTTCTGAATACAAAACACTACAGTAACAACAACTATATTTACCAAAGTATTAACGGAAGTTTAAACAGGATTTTATTTAAGTAA
PRKN
PRKN-202

17,000

CGGCTTATTGAAGCAATGCCACAATGGATTGCAGACTTAAAAGATTTACTTGGGCCTGGGGATTAGCAAAGATTTATCTCAAAGT
GCCGAATAACTTCGTTACGGTGTACCTAACGTCTGAATTTCTAAATGAACCCGGACCCCTAATCGTTTCTAAATAGAGTTTTCA
PRKN
PRKN-202

17,085

CCATTTGTACTTTCTCCAGGTGTTTCTGGGGGAGAATGACTTAAAGATAATTTGACTGGATTTTGGTATGCTTTTCATTCATTCAT
GGTAAACATGAAAAGAGGTCCACAAGGACCCCTCTTACTGAATTTCTATTAAACTGACCTAAAACCATACGAAAGTAAGTAAGTA
PRKN
PRKN-202

17,170

TGAACAAAGAGAGATAGGGAATGGAGATCTTAGTTACAATTCCTTTGAATGCATTTGTTATGTCTTAAAGCTTCTTTTGTCAATT
ACTTGTCTCTCTATCCCTTACCTCTAGAATCAATGTTAAGGGAACTTACGTAAACAATACAGAATTCGAAGAAAACAGTTAA
PRKN
PRKN-202

17,255

CACATATTAATTCTGGCTATAGCTGGCATTCTGTTGTGACTTAGAATTACTGTGTAAGTTCTTTGTCAGTCTGATTTTTGACATT
GTGTATAATTAAGACCGATATCGACCGTAAGACAACACTGAATCTTAATGACACATTCAAGAAACAGTCAGACTAAAAACTGTAA

17,340

PRKN

PRKN-202

ACCAATAGCTACTTTCCATCAACTTAAGATTTTCTTAAAATTTAGGGATCAGATGGGATCTGATAGTTTATCCAGTCATCAGACT
TGGTTATCGATGAAAGGTAGTTGAATTCTAAAAGAATTTTAAATCCCTAGTCTACCCTAGACTATCAAATAGGTCAGTAGTCTGA

17,425

PRKN

PRKN-202

CTGAGGAGCATGGTGAGAACTCAGGTATACGTACAAAAAGTTAAACTGGAATCTTTAACATAGCCTTTTACAGTAAGTGGTTTT
GACTCCTCGTACCACTCTTTGAGTCCATATGCATGTTTTTCAATTTGACCTTAGAAATTGTATCGGAAAGTGTCAATTCACCAAAA

17,510

PRKN

PRKN-202

CTTTCTGTCATGGAAATTGTTGGAAGATTTTTATGTGTTGTAGCACCAGTGTGGTGCACACAGAGCTATATA
GAAAGACAGTACCTTTAACAACCTTCTAAAAATACACAACATCGTGGTCACAAACACGTGTGTCTCGATATAT



3'











17,583







5'

PRKN

PRKN-202

Feature		Location	Size			Type
PACRG		1 .. 17,583	17,583 bp			gene
/note	= gene ENSG00000112530 Protein coding					
PRKN		1 .. 17,583	17,583 bp			gene
/note	= gene ENSG00000185345 Protein coding					
PACRG-201		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000337019 Protein coding					
PACRG-203		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000366889 Protein coding					
PRKN-201		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000338468 Nonsense mediated decay					
PRKN-202		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000366892					
PRKN-203		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000366894 Nonsense mediated decay					
PRKN-204		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000366896					
PRKN-205		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000366897					
PRKN-206		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000366898					
PRKN-207		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000479615 Nonsense mediated decay					
PRKN-212		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000673871 Nonsense mediated decay					
PRKN-221		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000674436 protein_coding_CDS_not_defined					
PRKN-223		1 .. 17,583	17,583 bp			prim_transcript
/note	= primary transcript ENST00000674501 Retained intron					
PRKN-216		1 .. 9275	9275 bp			prim_transcript
/note	= primary transcript ENST00000674232 Retained intron					
PRKN-202		8804 .. 8919	116 bp			CDS
/note	= coding sequence ENSP00000355858					
/translation	= EFFFKCGAHPTSDKETSVALHLIATNSRNITCITCTDV 38 amino acids = 4.2 kDa					
PRKN-204		8804 .. 8919	116 bp			CDS
/note	= coding sequence ENSP00000355862					
/translation	= EFFFKCGAHPTSDKETSVALHLIATNSRNITCITCTDV 38 amino acids = 4.2 kDa					
PRKN-205		8804 .. 8919	116 bp			CDS
/note	= coding sequence ENSP00000355863					
/translation	= EFFFKCGAHPTSDKETSVALHLIATNSRNITCITCTDV 38 amino acids = 4.2 kDa					
PRKN-206		8804 .. 8919	116 bp			CDS
/note	= coding sequence ENSP00000355865					
/translation	= EFFFKCGAHPTSDKETSVALHLIATNSRNITCITCTDV 38 amino acids = 4.2 kDa					

Feature	Location	Size			Type
✓ Donor Template SNV -> Rev	8880 .. 8979	100 bp			misc_feature
✓ gRNA Protospacer Sequence	8898 .. 8917	20 bp			misc_feature
✓ SNV	8904 .. 8904	1 bp			misc_feature
/note = SNV = T REV = C					
✓ PAM	8918 .. 8920	3 bp			misc_feature

Primer	Length		Binding Sites		Tm	Date Added
✓ PCR Forward	25-mer		8269 .. 8293		58°C	May 19, 2023
/sequence	=	tgtgtacttggtggctatttacag				
		40% GC / 7709.1 Da				
✓ Donor Template SNV -> Rev	100-mer		8880 .. 8979 8918 .. 8936	 	74°C 44°C	May 19, 2023
/sequence	=	tatnttttagatccttacctcagtcctggagggaagtgcactatnttttagatccttacCTGACGTCTGTGCACGTAATGCAAGTGATGTTCCGACTAT				
		43% GC / 30,760.0 Da				
✓ gRNA Protospacer	20-mer		8898 .. 8917		54°C	May 19, 2023
/sequence	=	GCATTATGTGCACAGACGTC				
		50% GC / 6117.0 Da				
✓ Sanger Sequencing Primer	21-mer		9064 .. 9084		55°C	May 19, 2023
/sequence	=	gcagacgcatcaaaataaagc				
		43% GC / 6441.3 Da				
✓ PCR Reverse	25-mer		9147 .. 9171		58°C	May 19, 2023
/sequence	=	ctcccatcttaggaccctattacc				
		48% GC / 7487.9 Da				