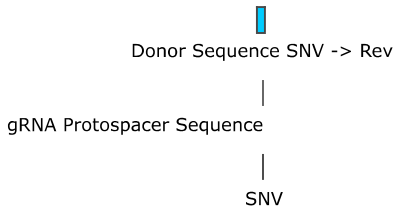
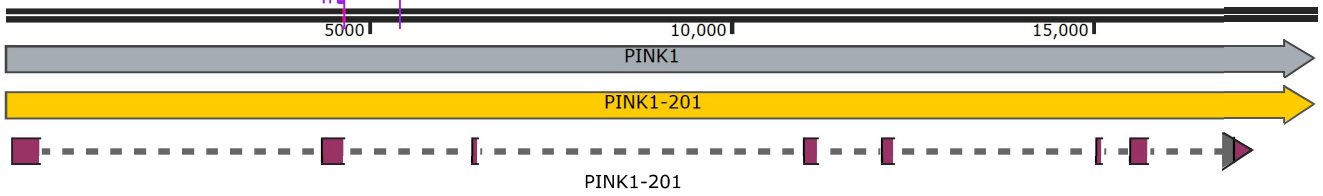


(4582 .. 4681) Donor Template SNV -> Rev  
(4465 .. 4484) Sanger Sequencing Primer  
(4386 .. 4410) PCR Forward  
gRNA Protospacer (4644 .. 4663)  
PCR Reverse (5404 .. 5428)



**ASK2J00173R\_PINK1\_A217D\_B02\_AA**  
18,054 bp

5'  
3'

AGAGGGCACCGCCCAAGTTTGTGTTGTGACCGGGCGGGGGACGCCGGTGGTGGCGGGCAGCGGGCGGCTGCGGGGGCACCGGGCCGCGGC  
TCTCCGTGGCGGGTTCAAACAACACTGGCCGCCCCCTGCGGCCACCACCGCCGTCGCCGCCGACGCCCCCGTGGCCCGGCGCCG

85

PINK1

PINK1-201

GCCACCATGGCGGTGCGACAGGGCGCTGGGCGCGGGCCTGCAGCTGGGTGCGAGCGCTGCTGCTGCGCTTCACGGGCAAGCCCGGCC  
CGGTGGTACCGCCACGCTGTCCGCGACCCGGCGCCGGACGTGACCCAGCTCGCGACGACGACGCGAAAGTGCCCGTTCGGGCGCGG

170

PINK1

PINK1-201

1 5 10 15 20 25  
M A V R Q A L G R G L Q L G R A L L L R F T G K P G

ENSE00001465660

PINK1-201

GGGCCTACGGCTTGGGGCGGCCGGGCCCCGGCGGGCGGGCTGTGTCCGCGGGGAGCGTCCAGGCTGGGCGCAGGACCGGGCGCGGA  
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255

PINK1

PINK1-201

30 35 40 45 50 55  
R A Y G L G R P G P A A G C V R G E R P G W A A G P G A E

ENSE00001465660

PINK1-201

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340

PINK1

PINK1-201

60 65 70 75 80  
P R R V G L G L P N R L R F R Q S V A G L A A R L Q R

ENSE00001465660

PINK1-201

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GTCAAGCACCACGCCCGGACCCCGACGCGCCCGGGAACGCCGGCCCGTACAGAAAGACCGGAAGCCCGATCCCGACCCGGAGTAGC

425

PINK1

PINK1-201

85 90 95 100 105 110  
Q F V V R A W G C A G P C G R A V F L A F G L G L G L I

ENSE00001465660

PINK1-201

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TCCTTTTTGTCCGCTCTCGGCCGCCCGCCAGAGCCGGACAGTCTCTAGGTCCACTCGCCCCGGCCAGGATTCGGCTCGCCTC

510

PINK1

PINK1-201

115 120 125  
E E K Q A E S R R A V S A C Q E I Q

ENSE00001465660

PINK1-201

GACGGAGCTAAGCGCGGGGGCGGGTCTCTCAGCTGGGTGGGGCGGGGCTAGGTGTGGAGGCGGGGCTCTGAGCAGATCGAGGGCC  
CTGCCCTCGATTGCGGCCCGCCAGGAGTCGACCCACCCCGCCCGATCCACACCTCCGCCCGGAGACTCGTCTAGCTCCC

595

PINK1

PINK1-201

-----

PINK1-201

GAGGCGAGGGTCTTTAAAGCTCATCTATTTTACCATTACTGATCGGCTGCTATAAATAAAGCCAGCACCTCCCATTTGTTTTAAT  
CTCCGCTCCAGGAATTTTCGAGTAGATAAAGTGGAATGACTAGCCGACGATATTTATTTTCGGTCGTGGAGGGTAAACAAAATTA

680

PINK1

PINK1-201

PINK1-201

GTTTCCCTTCCTCAAATGAAGACATGTTGCCGATTACAGCTCCTGTCGCAGCACAGCAAAGGCTTTGTGTAAATTTTCTAAAAT  
CAAAGGGAAGGAGTTTACTTCTGTACAACGGCTAATGTGCGAGGACAGCGTCGTGTCGTTTTCCGAAACACATTTAAAAGATTTTA

765

PINK1

PINK1-201

PINK1-201

GTACGGACAACATAAATCATAACATTCCTATCCCTTTGAGGTAGTTGCCGTCCCTAATTTATGGAGAAGGAAAGTCCTCAGGTGAA  
CATGCCTGTTGATTTAGTATTGTAAGGATAGGGAAACTCCATCAACGGCAGGGATTAAATACCTCTTCTTTTCAGGAGTCCACTT

850

PINK1

PINK1-201

PINK1-201

GGGACTTGCTCGAAGTCACACAGCTAATAAAATGCAGTGCCCTTAACCACTGAGCCAGGCTGCCTCCGCCGTTTAACCAAAGGAT  
CCCTGAACGAGCTTCAGTGTGTCGATTATTTTACGTACGCGGAATTGGTGACTCGGTCCGACGGAGGCGGCAAATTGGTTTCCTA

935

PINK1

PINK1-201

PINK1-201

TAGTAGTGACAGAGCTGAAACCGCAGTAAAACTATGAACGGCGAGAAAAACAGTCCTAACATTTTAGTTACCTGTGTAGAGTTA  
ATCATCACTGTCTCGACTTTGGCGTCAATTTTGTACTTTGCCGCTCTTTTTGTGAGGATTGTAATAATCAATGGACACATCTCAAT

1020

PINK1

PINK1-201

PINK1-201

TCCCTGCTGACTGGATACACAAGGGTTCTTAGGGTTTTTAAATGCTTAAATAGCACAAAGACTTCTCTTTTTGCCCAACCAAAGT  
AGGGACGACTGACCTATGTGTTCCCAAGAATCCCAAAAAATTACGAATTTTATCGTGTTCTGAAGAGAAAAACGGGTTGGTTTCA

1105

PINK1

PINK1-201

PINK1-201

CTGTATTAGGGTTCTCCAAATGGAATCAATAGGATGTGTCTATATAGAGGCAGGTTTATTTTGGAGACCTGGCTCCCTATGGGGA  
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1190

PINK1

PINK1-201

PINK1-201

TTGGCAAAGTCTTAAAAGCCGCAGAGTAGGCCGGGCAGGCTGGAGAGCCAGGGAGGAGCCAGCGGTGCAGTTTCAGGTTTGAAGCCT  
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1275

PINK1

PINK1-201

PINK1-201

GGCCGCTGGCAGAATTCATCTTCTTCCAGGGAGGTCACCTCTTCTTCTGCGGGGTGTAGAACCCTCACTAAATTAGCATAGCCC  
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1360

PINK1

PINK1-201

PINK1-201

CTGCATTTTACAGGTTAGGGCTGAGGTGGTGGAAAGAGGGAGTGACTTGCCCAAGGACACAGCTGTTAGGGCCAAGCAGTGGCTCC  
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1445

PINK1

PINK1-201

PINK1-201

TGGGTTTTCTGGTTTTCCATCCAGTTCTTATTGCTCATCACCCTGTCTCATGTTTGAGCTCTGGCCAGTTTGGGGTGACAGGTG  
ACCCAAAGGACCAAAGGTAGGGTCAAGAATAACGAGTAGTGGTGACAGAGTACAAACTCGAGACCGGTCAAACCCCACTGTCCAC

1530

PINK1

PINK1-201

PINK1-201

ACATCTGGCCTAGTCCCCAGCCCCTGACCTTGTCTTTTGCCACAGCTTAACTGGCAGAAGCTAAGGATGGGAAATTTGACTAATC  
TG TAGACCGGATCAGGGGTGCGGGGACTGGAACAGAAAACGGTGTGCAATTGACCGTCTTCGATTCTTACCCTTTAAACTGATTAG

1615

PINK1

PINK1-201

PINK1-201

CTGCTTAAACTAAAGAGGCTTTTTTAACTGAGGAGATTGATCCTCCTAACTTACCATTACACACACCTTCTTCGCACACTTC  
GACGAATTTTGATTTCTCCGAAAAAATTGACTCCTCTAACTAGGAGGATTTGAATGGTAAGTGTGTGTGGAAGAAGCGTGTGAAG

1700

PINK1

PINK1-201

PINK1-201

ACCCTCCTATGCCTGAAAATGTTATTAGTTATCAATTAATTTACATTAATAAATTTTGGTCAGGCACTGTGGCTCATGC  
TGGGAGGATACGGACTTTTACAATAATCAATAGTTAATTAAGTGTAATTTTTTAAAAAACCAGTCCGTGACACCGAGTACG

1785

PINK1

PINK1-201

PINK1-201

CTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCGGATCACGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGGAAACC  
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1870

PINK1

PINK1-201

PINK1-201

CTGTCTCTACTAAAAATACAAAAATTACCCGGGCGCAGTGTTGGGCGCCTGTAATCCCAGCTACTTGGGAGACTGAGGCAGGAGA  
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1955

PINK1

PINK1-201

PINK1-201

ATTCTTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCTGAGATCACGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGA  
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2040

PINK1

PINK1-201

PINK1-201

CTGGGGGGAGAAAAAGTTGTTTTCACTGGCTACTTTTTGCTGGAATTAATTTACATTTAAAAAATTCTGGGCCGGGCGGGGTGGC  
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2125

PINK1

PINK1-201

PINK1-201

TCATGCCTGTAATCTCAGCACTTTGGGAGGCCAAGGCGGGCGGATCATGAGGTCAGGAGATCGAGACCATCCTGGCTAACATGGT  
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2210

PINK1

PINK1-201

PINK1-201

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CTTTGGGGCGGAGATGATTTTTATGTTTTTTAATCGGTCCGTACCACCGTCCGCGGACATCAGGGTCGATGAGCCCTCCGACTC

2295

PINK1

PINK1-201

PINK1-201

GCAGGAGAATGGCGTGAACCCGGGAGGCAGGGCTTGCAGTGAGCCAAGATCGCGCCACTGCACTCCAGCCTAGAGGACAGAGTGA  
CGTCTCTTACCGCACTTGGGCCCTCCGTCCCGAACGTCCTCGGTTCTAGCGCGGTGACGTGAGGTCGGATCTCCTGTCTCACT

2380

PINK1

PINK1-201

PINK1-201

GACTCCGTCTCAAAAAAAAAATAAAAAAAAAAAAAAAAAATAAAAAAAAAATTCTGAAGCCAGGCATGGTGACTCATGCCTATAATCCTGGTGCT  
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2465

PINK1

PINK1-201

PINK1-201

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2550

PINK1

PINK1-201

PINK1-201

TATTA AAAAGTTAGCTAGGCATGGTGGCACATGCCGATAGTCCCAGCTACTTAGGAGGCTGAGGTGGGTGGATTGCTTGAGCCCA  
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2635

PINK1

PINK1-201

PINK1-201

GGAGTTTGAGGCTGCAGTGAGCTGTAGTTGCAACACTGCACCCCATCCTGGGCAACTAGCAGGAGTGTGCTAGTAGCAAGCTCTA  
CCTCAAACCTCCGACGTCACCTCGACATCAACGTTGTGACGTGGGGTAGGACCCGTTGATCGTCTCACACGATCATCGTTCGAGAT

2720

PINK1

PINK1-201

PINK1-201

AAAATTTATATTATAAAAAATATATATAATGTGTATATATGTATATGTGTATATATGTTGTGTATACTATAATATGTATGTT  
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2805

PINK1

PINK1-201

PINK1-201

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2890

PINK1

PINK1-201

PINK1-201

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2975

PINK1

PINK1-201

PINK1-201

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3060

PINK1

PINK1-201

PINK1-201

TTTTTTAGTAGAGACGGGGTTTCACTATGTTGGCCAGGCTGGTCTTGAACCTCCTGACTTCATGATCCGCCTCCCTCGGCCTCCCA  
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3145

PINK1

PINK1-201

PINK1-201

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3230

PINK1

PINK1-201

PINK1-201

AGTTGCTTACAGATAGCAGGTGCTTTAGGAACCCTCTAGAAGGAAAGTTGCCATGGGCTGGGTTCATCAGGGCTGGTCACAGAGGA  
TCAACGAATGTCTATCGTCCACGAAATCCTTGGGAGATCTTCTTTCAACGGTACCCGACCCAGTAGTCCCAGCCAGTGTCTCCT

3315

PINK1

PINK1-201

PINK1-201

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3400

PINK1

PINK1-201

PINK1-201

GTGAGCAGCTTTTCAGAGGGAGGCGTCCAAAGGATGAGTGCAGGCAGCGTGCAGACCAGCCTGGCAGCAGCCAGAACACAGATAAC  
CACTCGTCGAAAAGTCTCCCTCCGCAGGTTTCTACTCACGTCCGTGCGACGTCTGGTCCGACCGTCTGTCGGTCTTGTGTCTATTG

3485

PINK1

PINK1-201

PINK1-201

CTCCTGGGCAGTCTGATGGACAGCCGAGTGACACATGAAAGCAACATATTTTGATGTGGCTCAGAGCAGGGGAAGGCACGGCACTG  
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3570

PINK1

PINK1-201

PINK1-201

AGAGTGGGGTAGTCTAGAGATGGTGCCTGGTAGGCTATGGCCAAGGGGCATATGCAGAGCTGTGCCTGGCACCCAGGGGTGACTA  
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3655

PINK1

PINK1-201

PINK1-201

ACCTTGGAAAGGAAGAGCTCAGCAGATCAGACCATTTGAGAGGGAAAGCGGAGCCTGGGTGACTGGAAGAGTGACGTCACCGCTG  
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3740

PINK1

PINK1-201

PINK1-201

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3825

PINK1

PINK1-201

PINK1-201

TATTTCTGTCTGAACTCTTGTACTCTTGCTACCTTTCTGGACAGAGTAGCCTCATCGGGGCCCTAAGAGGCAGAGAGAGAAAGAC  
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3910

PINK1

PINK1-201

PINK1-201

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3995

PINK1

PINK1-201

PINK1-201

TCCTGCTAGTTGCCAGGAGCCGTCAGCCAAGGTCTTTGCAGAGCGAGCTGTCTCCATAATCAGACACCTCCAGAACTCTGCTGG  
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4080

PINK1

PINK1-201

PINK1-201

AGAGTGAAGGCAGCAAGGAGAGGTGCACTGGCTGCGGGACGTGGGGTTTCTGACCTCTCAGATCATTGAGTATTGTGATCCCAGT  
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4165

PINK1

PINK1-201

PINK1-201



GAAGCAACAGAGTTTGGAGAAAAATCATTCTGAATAATGAGAAAAGAAGATGGCCTGGACCCAGGCTGAGCAGTAGAACCTGGTTGG  
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4250

PINK1

PINK1-201

PINK1-201

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4335

PINK1

PINK1-201

PINK1-201

PCR Forward

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4420

PINK1

PINK1-201

PINK1-201

130 135 140  
A I F T Q K S K P G P D  
ENSE00001041274

Sanger Sequencing Primer

TCTGATAGGGCAGTCCATTG

CCGTTGGACACGAGACGCTTGCAGGGCTTTTCGGCTGGAGGAGTATCTGATAGGGCAGTCCATTGGTAAGGGCTGCAGTGCTGCTG  
GGCAACCTGTGCTCTGCGAACGTCCCGAAAAGCCGACCTCCTCATAGACTATCCCGTCAGGTAACCATTCCCGACGTCACGACGAC

4505

PINK1

PINK1-201

PINK1-201

145 150 155 160 165  
P L D T R R L Q G F R L E E Y L I G Q S I G K G C S A A  
ENSE00001041274

Donor Template SNV -> Rev

CCCAGGTAC

TGTATGAAGCCACCATGCCTACATTGCCCCAGAACCTGGAGGTGACAAAAGACCCGGGTTGCTTCCAGGGAGAGGCCAGGTAC  
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4590

PINK1

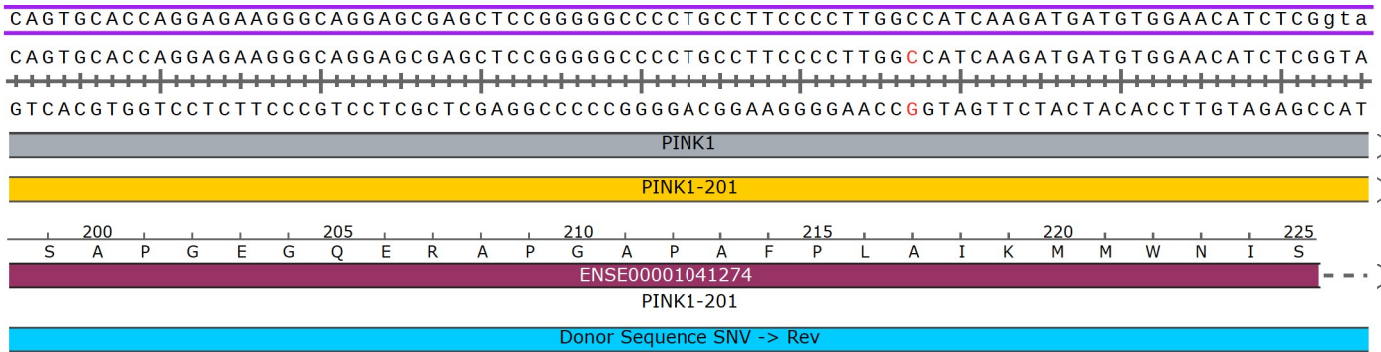
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PINK1-201

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ENSE00001041274

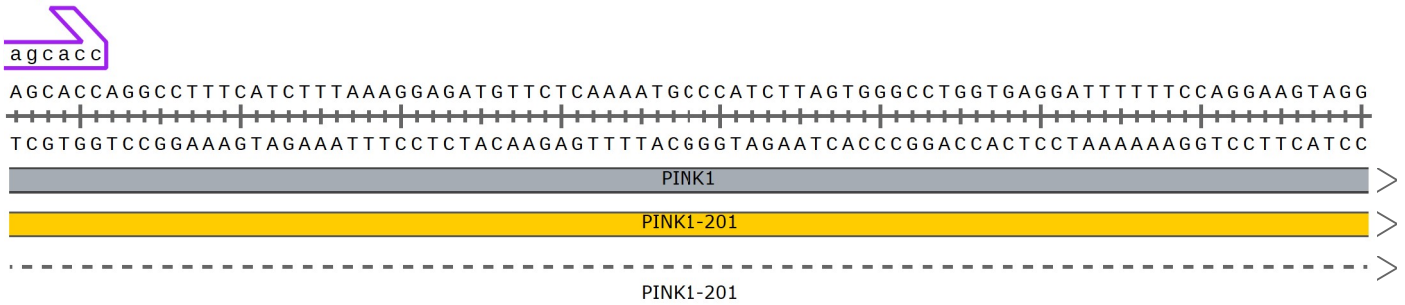
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Donor Template SNV -> Rev



4675

Donor Template SNV -> Rev

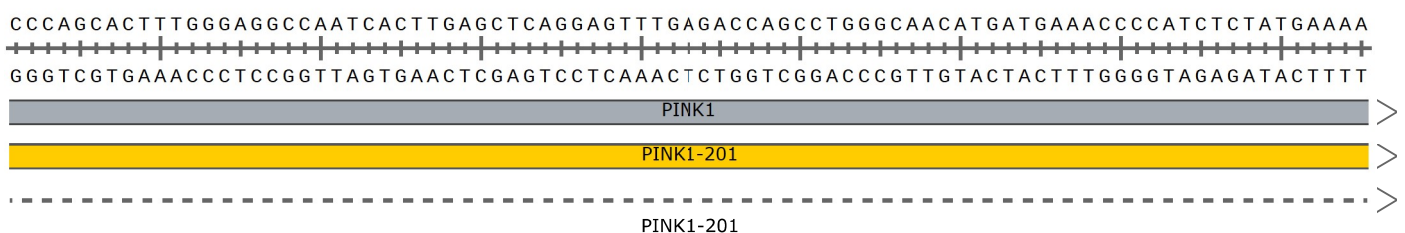
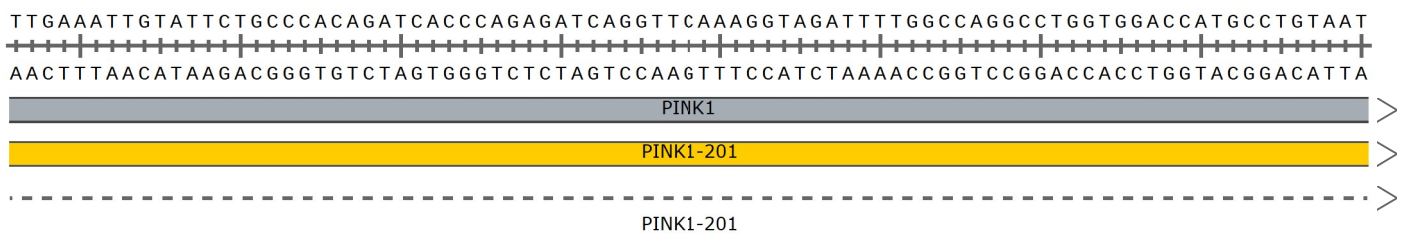
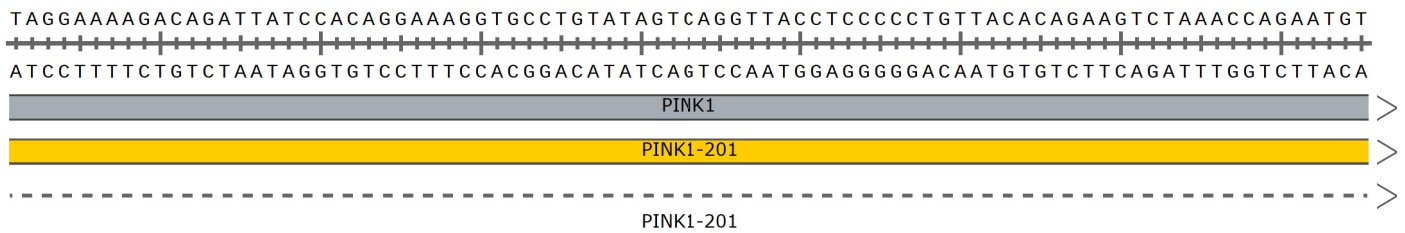


4760

4845

4930

5015



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TATGTTTTTAATCGGCCACACTGTCGAACGTGGACATACATCAGAATCGATGAACCCACCGACCACCGACTTCACCCTCCTAGT

5100

PINK1

PINK1-201

PINK1-201

CTTGAGTGCAAGAGGCAGAGGCTGCAGTGATCCAAGATTGTGGCACTGCACTCCAGCCTGGGTAAACAGAGTAAGACCCTGTCTCA  
GAACTCACGTTCTCCGTCTCCGACGTCAGTGGTTCTAACACCGTGACGTGAGGTCGGACCCATTGTCTCATTCTGGGACAGAGT

5185

PINK1

PINK1-201

PINK1-201

AAACAAACAAACAAACAAACAAACAAACAAACAAAGGTAGATTCTGATTCAGCAGGTCAGGGATGGGGCCTAAGATTGTGCCTTCCCAA  
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5270

PINK1

PINK1-201

PINK1-201

TAAGCTCCCACGTGATACCAATGCCACTGCTCTGTCAACCACACTTTGAGTAACAAGTGCCTAAACCACTGATTTCTACCTTGAT  
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5355

PINK1

PINK1-201

PINK1-201

TGGTTAGTTCACCATCCCCTCCTTCCCTGCAACCTGCCTCACTGGAGAGGGGGAACTGGATCTCTTTCCCTTAAGCTCACTCTGCA  
ACCAATCAAGTGGTAGGGGAGGAAGGACGTTGGACGGAGTGACCTCTCCCCCTTGACCTAGAGAAAGGAAATTCGAGTGAGACGT

5440

PINK1

PINK1-201

PINK1-201

ccccttgacctagagaaggaaatt

PCR Reverse

AGCCACCTCCAGCTCAGAGGCTTGCATGTCAACTCCCTACTCTCAACTCTTGGAAAGGACTCAAGACTTTGGGAAATTGAAGAGT  
TCGGGTGGAGGTCGAGTCTCCGAACGTACAGTTGAGGGATGAGAGTTGAGAACCTTCCCTGAGTTCTGAAACCCTTTAACTTCTCA

5525

PINK1

PINK1-201

PINK1-201

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5610

PINK1

PINK1-201

PINK1-201

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5695

PINK1

PINK1-201

PINK1-201

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CTCCTACGTCAAAGAACAAGACTAAACCCCTTACTTCCAATAATCTGACAACGTGAGGTTTCGACCCAATTATCGATTGTTTCATCG

5780

PINK1

PINK1-201

PINK1-201

CAAATCCTTTGCCTGTGAAACATCCAGTCTTAGCATCAAACATGCCCTGGTTGGGGCATGACAGCTGTTGCATTACAGCAGCT  
GTTTAGGAAACGGACACTTTGTAGGTCAGAATCGTAGTTTTGTACGGGACCAACCCCGTACTGTGACAACGTAAGTGTCTGTCGA

5865

PINK1

PINK1-201

PINK1-201

ACAAGATTGTTGATTCTTACCAGATCTTCTTGATACAGGTTTCATATGTCCTGAGAGCCCTTCCCAATACAATGAGGACAATAAG  
TGTTCTAACAACTAAGAATGGTCTAGAAGAACTATGTCCAAAGTATACAGGACTCTCGGGAAGGGTTATGTTACTCCTGTTATTC

5950

PINK1

PINK1-201

PINK1-201

GTGCTTTCCCACTCTTTGGTTTTTGTCTGTTTGTCTGTTGGGGGATGGAGGAAGGCTGTTCTGTGATTCAGTACAACCTCACCCAG  
CACGAAAGGGGTGAGAAACAAAAACAGACAAACAGCACCCCTACCTCCTTCCGACAAGACACTAAGTCATGTTGAAGTGGGTC

6035

PINK1

PINK1-201

PINK1-201

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CCACCTCGTACAGTCCGAGACCGGACCGACGACTTCCCTCGGACGTCTTACTCAATCACTAGGTCACCAGTTAAAACTTGACCAC

6120

PINK1

PINK1-201

PINK1-201

GGGACCAGAGGCACCGATGGCAGGAAGCAGCACCCCATATCCTGATCACCTTGGCATCTCCTCCAGCCCTGGCATCTAGGCTGCA  
CCCTGGTCTCCGTGGCTACCGTCCCTCGTCTGGGGTATAGGACTAGTGGAAACCGTAGAGGAGGTCGGGACCGTAGATCCGACGT

6205

PINK1

PINK1-201

PINK1-201

AGAGTTTGGAGGAGTGTGAAGAATCCTCTGAGTTGGCATGGATGGTACCTCTGTCTGCCTCCCAGGAGTAACTAGTCTCAGCCTGC  
TCTCAAACCTCCTCACACTTCTTAGGAGACTCAACCGTACCTACCATGGAGACAGACGGAGGGTCTCATTGATCAGAGTCGGACG

6290

PINK1

PINK1-201

PINK1-201

CAGTTAAGACAGGTCATCTTATCTCGAAGGTCAGAGCCAATTCTAGGCAGTAGCTGCCCTGCTCCAGGTTACAGGCAGGGCTTAC  
GTCAATTCTGTCCAGTAGAATAGAGCTTCCAGTCTCGGTTAAGATCCGTTCATCGACGGGACGAGGTTCCAATGTCCGTCCCGAATG

6375

PINK1

PINK1-201

PINK1-201

AAGGAACTTACCATTCTGCTCCGGCCTGTGTAACCCTGGGTTCTTGTGGGTGTTCCAGGCAGGTTCTCCAGCGAAGCCATCTT  
TTCCTTGAATGGTAAGACGAGGCCGGACACATTGGGACCCAAGGAACACCCACAAGGTCCGTCCAAGGAGGTCGCTTCGGTAGAA

6460

PINK1

PINK1-201

PINK1-201

A G S S S E A I L  
ENSE00001041273

GAACACAATGAGCCAGGAGCTGGTCCCAGCGAGCCGAGTGGCCTTGGCTGGGGAGTATGGAGCAGTCACTTACAGGTAAGTGCCC  
CTTGTGTTACTCGGTCCTCGACCAGGGTTCGCTCGGCTCACCGGAACCGACCCCTCATACCTCGTCAGTGAATGTCCATTACGGG

6545

PINK1

PINK1-201

PINK1-201

235 N T M S Q E L V P A S R V A L A G E Y G A V T Y R  
240 245 250 255

ENSE00001041273

TCTGCCTGCCAGACTGACTGGGACTTCTTTGAGAGCAACTTCATCCATCACTTATGTCCTCAGCACCTGGTACAGTGTCTGATAT  
AGACGGACGGTCTGACTGACCCTGAAGAACTCTCGTTGAAGTAGGTAGTGAATACAGGAGTCGTGGACCATGTCCACAGACTATA

6630

PINK1

PINK1-201

PINK1-201

GACAGTAGATAATAAAGGCTTAATGTTGGTGATGGATTTTCAGTTAGTGGATAATTTCACTTGGGAAAGATTGCAGGTAATCTGA  
CTGTCATCTATTATTTCCGAATTACAACCACTACCTAAAAGTCAATCACCTATTAAGTGAACCCTTTCTAACGTCCATTAGACT

6715

PINK1

PINK1-201

PINK1-201

CCCCAAATGATGATGCACTTTCGTAATTCACATTGGAGCAGGGGAGAGGAGGCCCCCAAAAATGCCAGTTCACAGTGTTCAT  
GGGGTTTACTACTACGTGAACGCATTAAGTGTAACCTCGTCCCCTCTCCTCCGGGGGGTTTTTACGGGTCAAGTGTCCACAACGTA

6800

PINK1

PINK1-201

PINK1-201

GATTGACTGGGGTTCTCAGATTCCTCCTAAGAAATGCACGGGTAGAGCGCCACCTATCGGAATAAACTGAACTCTGTCCCCACCA  
CTAACTGACCCCAAGAGTCTAAGGAGGATTCTTTACGTGCCCATCTCGCGGTGGATAGCCTTATTTGACTTGAGACAGGGGTGGT

6885

PINK1

PINK1-201

PINK1-201

GAGGGAACACTCATTTCACTAATAGTTATGTGCACTGATGGTGCCAAGAGATTTTTAAAAAACAAAAAGTGGTCTGTTGGCCCA  
CTCCCTTGTGAGTAAAGTGATTATCAATACACGTGACTACCACGGTTCTCTAAAATTTTTTTTGTTTTTTCACCAGACAACCGGGT

6970

PINK1

PINK1-201

PINK1-201

GAGGTCTCAGTGTGGCAGCAGAGAGCCAGGGTGTAAGTGCTAGAATCGAGTATGCTTGGGCTGAGGGAGCCAGGGGAGGCCTG  
CTCCAGAGTACACCGTCTCTCGGGTCCACATTCACGATCTTAGCTCATACGAACCCGACTCCCTCGGGTCCCCTCCGCAC

7055

PINK1

PINK1-201

PINK1-201

TGCTGCAGAGGAGGGGCTGCTCAGAAAGCCTTCTCAAAGGGACAGTTTGTGCCACCTTGTGAAGGATGAATTGGCATTACTTGGG  
ACGACGTCTCCTCCCCGACGAGTCTTTCGGAAGAGTTTCCCTGTCAAACACGGTGGAACACTTCTACTTAACCGTAATGAACCC

7140

PINK1

PINK1-201

PINK1-201

CAGAGGAGTAGGGAAGTGGCATTCCAGCAGAGGGAAGAGCAAGTGAACAGCAGCTACGCTTTCAGCTCAGAAAAGCCCATGTCC  
GTCTCCTCATCCCTTACCCTAAGGGTCTGCTCCCTTCTCGTTCACTTGTCTCGTATGCGAAAAGTCGAGTCTTTTTCGGGTACAGG

7225

PINK1

PINK1-201

PINK1-201

ACCACCAGCCTCACCACAGGTGGTGAGGACTGACGCGCAGGCTATGACAGAGGAGATACTTGTGCCACCTCAATATTTACAGCC  
TGGTGGTGGAGTGGTGTCCACCACTCCTGACTGCGCGTCCGATACTGTCTCCTCTATGAACACGGGTGGAGTTATAAATGTCGG

7310

PINK1

PINK1-201

PINK1-201

TGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGTAGGCAGATCACTTGAGCCCAGGAGTTCAAGAGCAGCCTGGGCAA  
ACCGAGTACGGACATTAGGGTCTGTAAACCCCTCCGACTCCATCCGTCTAGTGAACCTCGGGTCTCAAGTTCTCGTCTGGACCCGTT

7395

PINK1

PINK1-201

PINK1-201

CATGGTGAAACCCCGCCTTTACAAAAAATAAATTTTAGCCGGGCATGGGGGCAAATGCCTGTGATCCCAGCTACTCAGGAGGCTG  
GTACCACTTTGGGGCGGAAATGTTTTTTATTTAAAAATCGGCCCGTACCCCGTTTACGGACACTAGGGTCGATGAGTCTCCGAC

7480

PINK1

PINK1-201

PINK1-201

AGGCGGGAGGATCATTGAGTCCAGGGAGGTTGAGGCTGCAGTGAGCCAAGATCATGCCACTGCACTCCAGCCTGGGCGACCCTG  
TCCGCCCTCCTAGTAAACTCAGGTCCCTCCAACCTCCGACGCTCACTCGGTTCTAGTACGGTGACGTGAGGTCTGGACCCGCTGGGAC

7565

PINK1

PINK1-201

PINK1-201

GAGTGAGACCCTGTCTCTCATTGTTAGACCCACCAAGAAGAGGTGGGTCTGCTGCATTTTTGGTGATTTACTGGAGGGCTGGTTT  
CTCACTCTGGGACAGAGAGTAAACATCTGGGTGGTTCTTCTCCACCCAGACGACGTAAAAACCACTAAATGACCTCCCGACCAA

7650

PINK1

PINK1-201

PINK1-201

ATAGATCTTCATTCTGTCAGAAGCAGGGAGGCAAAAGTATGAAATTAAGGGAGTGGTTGTGGAAAACCCCTTCCATGGTTTTGGAG  
TATCTAGAAGTAAGACAGTCTTCGTCCCTCCGTTTTTCACTACTTTAATTCCCTCACCAACACCTTTTTGGGGAAGGTACCAAACCTC

7735

PINK1

PINK1-201

PINK1-201

GTTTCCAATGTGACTGGGAGTCCCTGCAGGCCGGTGGAGGTAGCTGCTCAAGTGGCTGCTGCTTCTCCTGAGGCCTTTTTGGAGA  
CAAAGGTTACTACTGACCCTCAGGGACGTCCGGCCACCTCCATCGACGAGTTCACCGACGACGAAGAGGACTCCGGAAAAACCTCT

7820

PINK1

PINK1-201

PINK1-201

AAGTGGACACCTGAATGTCAGCTGCTTTGGGGCTAACATGATCCTTGATGCCTCCTTTTTGTGGCATGAGTGGCAGCCGGCCGACG  
TTCACCTGTGGACTTACAGTCGACGAAACCCGATTGTAAGGAACTACGGAGGAAAAACACCGTACTCACCGTCGGCCGGCTGC

7905

PINK1

PINK1-201

PINK1-201

TGGTGCTGTCCTGCTGCCGGAGCACCATGATGTCTGCTGCTGAGACCTCCCATCTGACATAGTCCCTGTCCCTCTTCAGGGACTT  
ACCACGACAGGACGACGGCCTCGTGGTACTACAGACGACGACTCTGGAGGGTAGACTGTATCAGGGACAGGGAGAAGTCCCTGAA

7990

PINK1

PINK1-201

PINK1-201

TGTTCCCTTTAGCAGTTCTCACTGTCTGGCCTCAAATAACACGTCTTTTTCTGTTGGTTCCTTTTTGCTCCAGCTGTACTGTAAAC  
ACAAGGAAATCGTCAAGAGTGACAGACCGGAGTTTATTGTGCAGAAAAAGACAACCAAGGAAAAACGAGGTCGACATGACATTTG

8075

PINK1

PINK1-201

PINK1-201

ACTCTTTGTTTACTGCATACCCTCAGTAAATACCTGTTGAATGACCGGATAGATGTGGCAGCAGGTACATTACCTCAACTTCTGG  
TGAGAAACAAATGACGTATGGGAGTCATTTATGGACAACCTACTGGCCTATCTACACCGTCGTCCATGTAATGGAGTTGAAGACC

8160

PINK1

PINK1-201

PINK1-201

TACACCTTGGGAGAAGCTTTCCCAAGAACACCCTGGGTTCAATTCCTCCTAGCCTCTGCTCTCCTGGGGCCAGAGATTGAAGGC  
ATGTGGAACCTCTTCGAAAGGGTTCTTGTGGGACCCAAGTAAAGGAGGATCGGAGACGAGAGGACCCCGGGTCTCTAACTCCG

8245

PINK1

PINK1-201

PINK1-201

GCTTAACCTGCTCATCTCACCACGTCTCCCGCCTTATCTCTCACCTTCTCATCAGCACCTTACACTCCACCACGCTGGCTTCAT  
CGAATTGGACGAGTAGAGTGGTGCAGAGGGCGGAATAGAGAGTGGGAAGAGTAGTCGTGGGATGTGAGGTGGTGCACCGAAGTA

8330

PINK1

PINK1-201

PINK1-201

AGCTCCTTCCCGAATGTGCCAGGCTTCTCTGTGACCATCTCTTGAGCGTACAGCTGGCTATACCTGGGCTGCCCTCCTCCACA  
TCGAGGAAGGGGCTTACACGGTCCGAAGAGACACTGGTAGAGAACTCGCATGTGACCGATATGGACCCGACGGGAGGAGGGTGT

8415

PINK1

PINK1-201

PINK1-201

TTTCAGGTCTCAGTTCAGACACCCGCAACCCACCATGTATCTCCCCAGTACAGCCATACTCCTCTGCCCTGAGCTCCCATGAC  
AAAGTCCAGAGTCAAGTCTGTGGGCGTTGGGGTGGTACATAGAGGGGTCATGTGCGGTATGAGGAGACGGGGACTCGAGGGTACTG

8500

PINK1

PINK1-201

PINK1-201

ACCTGCTGGGGCCCTGACAGCCTGGGGCTGTGATCATGACTTGCCAGGGGCCCCGAGGGTGGAAACGATGCTCTGGCTCCTTTGA  
TGGACGACCCCGGGACTGTGCGACCCCGACACTAGTACTGAACGGGTCCCGGGCTCCACCTTTGCTACGAGACCGAGGAAACT

8585

PINK1

PINK1-201

PINK1-201



TTGCATAGAACAGGGGGCCACTCAGGTTGACTCAAGAGCAGGAGCAGCGCGTGGGCACACGTGGACTGCAGCCACACAGCCTGGGG  
AACGTATCTTGTCCCGGTGAGTCCAACCTGAGTTCTCGTCTCGTCGCGCACCCGTGTGCACCTGACGTGCGGTGTGTGCGGACCCC

8670

PINK1

PINK1-201

PINK1-201

ACCATGCAGTGCTGGGAGAGGGCCGGTGCCTGCTCTCTCCCCAGCACCGTCTAGGCTCTGCCCCATTTCGCTTCCCTCCACCATTG  
TGGTACGTCACGACCCTCTCCGGCCACGGGACGAGAGAGGGGTCTGTGGCAGATCCGAGACGGGGTAAGCGAAGGGAGGTGGTAAC

8755

PINK1

PINK1-201

PINK1-201

TTATGCAGCAAAGGGGGCTCTAGCCTGATGTGCTAGAAGCAGTCAACTGGATTTTTGAGAAAAGCCAAGCTTTCTATTGTGAGT  
AATACGTCGTTTTCCCGGAGATCGGACTACACGATCTTCGTCAGTGTGACCTAAAACTCTTTTCGGTTCGAAAGATAACACTCA

8840

PINK1

PINK1-201

PINK1-201

CGACTCATATGGAGACAGGAGTTGAATTC AACCCCTGTCTCCCTGTGCTAGCTTTAAGGCGGTAATTTTATTAGAGGAGGTTTAAG  
GCTGAGTATACCTCTGTCTCAACTTAAGTTGGGACAGAGGGACACGATCGAAATTCCGCCATTAAAATAATCTCCTCCAAATTC

8925

PINK1

PINK1-201

PINK1-201

GGGTGGATTCTAAGATTAGCAGGTGATTGATGGAAGGAAAGGAGAAGTCTGGACAGTCCCTGGACATGCACAGTTATCTGTTTCAT  
CCCACCTAAGATTCTAATCGTCCACTAACTACCTTCCTTTCTCCTCCTCAGACCTGTCAGGAACCTGTACGTGTCAATAGACAAGTA

9010

PINK1

PINK1-201

PINK1-201

GCCAACTCATGGGTCCCCTGTGCAGATTTGGGAGGAGTGAGTATGAAACGTGCAGTGGCAATTCAGGCTTTGACATCAGCAAAC  
CGGTTGAGTACCCAGGGGACACGTCTAAACCCTCCTCACTCATACTTTGCACGTCACCGTTAAGTCCGAAACTGTAGTCGTTTGA

9095

PINK1

PINK1-201

PINK1-201

TGTTCTGTGCAAGCTGCAATTGGCCTTATTGGTTCCAACCAATTTAGCCAGTTCTTTTATCTCATAAGCAGAGGGAGTTTCAGC  
ACAAGACACGTTTCGACGTTAACCGGAATAACCAAGGTTGGTTAAAGTCGGTCAAGAAAATAGAGTATTTCGTCTCCCTCAAAGTCG

9180

PINK1

PINK1-201

PINK1-201

CTTTCAGAAAAGTGGTTTCTGCAAACCTCAAATTTTCTTTTATTTTTCTGAGACAGGGTCTTACTCTGTTGCCAGGCTGGAGAGCA  
GAAAGTCTTTCACCAAAGACGTTTGGAGTTTAAAAGAAAAATAAAAAGACTCTGTCCCAGAATGAGACAACGGGTCCGACCTCTCGT

9265

PINK1

PINK1-201

PINK1-201

GTGGCGTGATCTTGGCTCACTGCAGCCTCAACCTCCCTGGGCTCAAGTGATCCTCCACCTCAGCCTCCCAAGTAGCTGGGTCTG  
CACCGCACTAGAACCAGGTGACGTCGGAGTTGGAGGGACCCGAGTTCACTAGGAGGGTGGAGTCGGAGGGTTCATCGACCCAGAC

9350

PINK1

PINK1-201

PINK1-201

CAGGCACATGCCACCATGCCAGCTAATTTTTGTAGTTTTGTAGAGACAGAGTTTCTCCATGTTGCCCGGGCTGGCCTCGAACT  
GTCCGTGTACGGTGGTACGGGTCGATTA AAAACATCAAAAACATCTCTGTCTCAAAGAGGTACAACGGGCCCCGACCGGAGCTTGA

9435

PINK1

PINK1-201

PINK1-201

CCTGGGCTCAAGCAATTGCCTGCCTCAGCCTCCCAAATTGCTGGGATTACAGGAGTGAGCCACGGGAATTTCCATCAGTTACTGA  
GGACCCGAGTTCGTTAACGGACGGAGTCGGAGGGTTTAAACGACCTAATGTCTCACTCGGTGCCCTTAAAGGTAGTCAATGACT

9520

PINK1

PINK1-201

PINK1-201

TTCTTGAAC TTGTAGGAACGTGGTTCCACTGTCCACATGCTGTTCTTCTCCTCGCATCTCCTGTTTCTGCTTCCCTTTGGCCTGCT  
AAGAACTTGAACATCCTTGACCAAGGTGACAGGTGTACGACAAGAAAGGAGCGTAGAGGACAAGGACGAAGGGAAACCGGACGA

9605

PINK1

PINK1-201

PINK1-201

CACCTCTGGCTCCTCATGGCCCCAGTGAAGTATCGTGGCTTCTCTCCACTGCAGACTGGCAGATTTCTTCACTCACACTCCCAA  
GTGGAGACCGAGGAGTACCGGGGTCACTTCATAGCACCGAAGGAGAGGTGACGTCTGACCGTCTAAAGAAGTGAGTGTGAGGGTT

9690

PINK1

PINK1-201

PINK1-201

AAAGAGAATCTACTTCCCTCCCTTCCCTTCGTCCAACCATCTGGGTCTCGAGTGTCAGTGTAGGTTCACTGCCGTTGGGGCAGGT  
TTTCTCTTAGATGAAGGGAGGGAAAGGGAAGCAGGTTGGTAGACCCAGAGCTCACAGTGACATCCAAGTGACGGCAACCCCGTCCA

9775

PINK1

PINK1-201

PINK1-201





TAGGTTATTCTTTCCAGGTGTTGTATCTGATGCTGGCCTCATATGTTTGTCTCACTTGGCTGACTAGAAAATCCAAGAGAGGTCC  
ATCCAATAAGAAAAGGTCCACAACATAGACTACGACCGGAGTATACAAACAGAGTGAACCGACTGATCTTTTTAGGTTCTCTCCAGG

11,050

PINK1

PINK1-201

260 K S K R G P 265  
ENSE00003577628

PINK1-201

CAAGCAACTAGCCCCACCCCAACATCATCCGGGTTCTCCGCGCCTTACCTCTTCCGTGCCGCTGCTGCCAGGGGGCCCTGGTC  
GTTTCGTTGATCGGGGAGTGGGGTTGTAGTAGGCCCAAGAGGCGCGGAAGTGGAGAAGGCACGGCGACGACGGTCCCCGGGACCAG

11,135

PINK1

PINK1-201

270 K Q L A P H P N I I R V L R A F T S S 285 290  
ENSE00003577628

PINK1-201

GACTACCCTGATGTGCTGCCCTCACGCCTCCACCCTGAAGGCCTGGGCCATGGCCGGACGCTGTTTCCTCGTTATGAAGAAGTAAG  
CTGATGGGACTACACGACGGGAGTGC GGAGGTGGGACTTCCGGACCCGGTACCGGCCTGCGACAAGGAGCAATACTTCTTCATTC

11,220

PINK1

PINK1-201

295 D Y P D V L P S R L H P E G L G H G R T L F L V M K N 320  
ENSE00003577628

PINK1-201

TGACAGCAGCGCGGCAGGGCCTGGAGCTGATACATCTCCCAAGGGGAGCTGGTTTCCTGCCCTCCATGTGCACCTTGATCAGGGGG  
ACTGTCGTCGCGCCGTCCCGGACCTCGACTATGTAGAGGGTTCCCTCGACCAAGGACGGGAGGTACACGTGGAAGTACTAGTCCCC

11,305

PINK1

PINK1-201

PINK1-201

TTTTGGAGAACAGGGTCATCACCCCTCCGGAGAAGAAAGCCATGCAAAGGGAACATATCTGCCCTGGAGAGCATTTTTCCCTGTAG  
AAAACCTCTTGTCCCAGTAGTGGGAAGGCCTCTTCTTTCGGTACGTTTCCCTTGTATAGACGGGACCTCTCGTAAAAGGGACATC

11,390

PINK1

PINK1-201

PINK1-201

GACGATTTTTCATGGAAACAAACTCTCATCTTCATCCAGAACATACTTGTACCTAGTCCTTTTGGTCCATTTGACTGTTAACCT  
CTGCTAAAAAGTACCTTTGTTTGAGAGTAGAAGTAGGTCTTGTATGAACAGTGGATCAGGAAAACCAGGTAAACTGACAATTGGA

11,475

PINK1

PINK1-201

PINK1-201

TTTCTGTGGCTGGACTTATCTGTTTTTAACATAAAAACCGTTCTCCTTCCCTCACCCCTCTGTATCCCCTAACTTTGCTATAGTGGG  
AAAGACACCGACCTGAATAGACAAAAATTGTATTTTTGGCAAGAGGAAGGAGTGGGAGACATAGGGGATTGAAACGATATCACCC

11,560

PINK1

PINK1-201

PINK1-201

TATTTTATTTTAAGGAAATAATTATCTGCACCATTACTTTGAATATAGGGAGCCCCAACTCTTACTTCCTAATTTGAGGATGGTG  
ATAAAATAAAATTCCTTTTATTAATAGACGTGGTAATGAAACTTATATCCCTCGGGGTTGAGAATGAAGGATTAAACTCCTACCAC

11,645

PINK1

PINK1-201

PINK1-201

AGTGGGAGGGAAACAGAAAGGATGCTGGGGAAAAGTGGGAATCAAAGTGCTCCTGGAAGGGGAAGAGGAACGGCCTAACCCCTAACA  
TCACCCTCCCTTGTCTTTCCTACGACCCCTTTTCACCCTTAGTTTCACGAGGACCTTCCCCTTCTCCTTGCCGGATTGGGATTGT

11,730

PINK1

PINK1-201

PINK1-201

GTGATTAAGGTTATTAGGAGGCCGGGAATGGTGGCTGACGCCTGTAATCCCAGCACTTTGGAAGGCGGAGGTGGGTAGATCACTT  
CACTAATTCCAATAATCCTCCGGCCCTTACCACCGACTGCGGACATTAGGGTCGTGAAACCTTCCGCCTCCACCCATCTAGTGAA

11,815

PINK1

PINK1-201

PINK1-201

GAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCTGTATCTACTAAACATACAAAAATTAGCCTGGTGTGGTGGC  
CTCCAGTCTCAAACCTCTGGTCGGACCGGTTGTACTACTTTGGGACATAGATGATTTGTATGTTTTTAATCGGACCACACCACCG

11,900

PINK1

PINK1-201

PINK1-201

GGGCACCTATAATCCCAGCTACTCGGGAGGCTGAGGTAGGAGAATTGCTTGAACCTGGAAGGTGGAGGTTGCAGTGAGCCAAGAT  
CCCGTGGATATTAGGGTCGATGAGCCCTCCGACTCCATCCTCTTAACGAACTTGGACCTTCCACCTCCAACGTCACTCGGTTCTA

11,985

PINK1

PINK1-201

PINK1-201

CGTGCTACTGCACTCCAGCTTGGCGACAGAGTGAGACTCCATCTCAAAAAAAAAAAAAAAAAACGTATTGGGAGTCGTCGATGTGT  
GCACGATGACGTGAGGTCGAACCGCTGTCTCACTCTGAGGTAGAGTTTTTTTTTTTTTTTTTGCATAACCCTCAGCAGCTACACA

12,070

PINK1

PINK1-201

PINK1-201

GGTAGCCAGAGGCCCTCTCCCCTCTCCGCCAGCTATCCCTGTACCCTGCGCCAGTACCTTTGTGTGAACACACCCAGCCCCCGCC  
CCATCGGTCTCCGGGAGAGGGGAGAGGCGGTCGATAGGGACATGGGACGCGGTCATGGAAACACACTTGTGTGGGTCGGGGGCGG

12,155

PINK1

PINK1-201

Y P C T L R Q Y L C V N T P S P R

ENSE00003693654

PINK1-201

TCGCCGCCATGATGCTGCTGTCAGCTGCTGGAAGGCGTGGACCATCTGGTTCAACAGGGGCATCGCGCACAGAGACCTGAAATCCGA  
AGCGGCGGTTACTACGACGACGTCGACGACCTTCCGCACCTGGTAGACCAAGTTGTCCCGTAGCGCGTGTCTCTGGACTTTAGGCT

12,240

PINK1

PINK1-201

L A A M M L L Q L L E G V D H L V Q Q G I A H R D L K S D

ENSE00003693654

PINK1-201

CAACATCCTTGTGGAGCTGGACCCAGGTAGGAACCTGCTGCACCATCAGAGCTCTCCAGGGGCACTAGAGGGTGGGTCAGGAGCA  
GTTGTAGGAACACCTCGACCTGGGTCCATCCTTGGACGACGTGGTAGTCTCGAGAGGTTCCCGTGATCTCCACCCAGTCTCTCGT

12,325

PINK1

PINK1-201

N I L V E L D P

ENSE00003693654

PINK1-201

TTTAGGACTGACTCTTCAGGTCCTCTCTGGTTTTGTGTTCTAAGTCATGTCTTTATTTAGCTCCGCACACAAGAGGTTAGCAATC  
AAATCCTGACTGAGAAGTCCAGGAGAGACCAAAACACAAGATTCAGTACAGAAATAAATCGAGGCGTGTGTTCTCCAATCGTTAG

12,410

PINK1

PINK1-201

PINK1-201

TCTCCCTTAGAACGGGGTTTTTTTTTCTCTCTTTGCAGAGAGACAGCACTTCCCAAGTTCCTTTCTCTAGCCCACTTAAAGAACA  
AGAGGGAATCTTGCCCCAAAAAAAAGAGAGAAACGTCTCTCTGTGCGTGAAGGGTTCAAGGAAAGAGATCGGGTGAATTTCTTGT

12,495

PINK1

PINK1-201

PINK1-201

AGGACCTCAGTGCTGCAAGTTTTCTTAGGTAATAAAGAGGCCCGGCACAGTGGCTGACACCTGTAATCCCAACACTTTGGGAGG  
TCCTGGAGTCACGACGTTCAAAGGATCCATTTATTTCTCCGGGCCGTGTACCCGACTGTGGACATTAGGGTTGTGAAACCTCC

12,580

PINK1

PINK1-201

PINK1-201

CTTGCTTGAGGATTGCTTGAGGCCAGCAGTTTGAGACCAGCCTGGGAAACAGAGTGAGATCCCTTCTCTACAAAAAAAATATG  
GAACGAACTCCTAACGAACTCCGGTCGTCAAACTCTGGTCGGACCCCTTTGTCTCACTCTAGGGAAGAGATGTTTTTTTTTTATAC

12,665

PINK1

PINK1-201

PINK1-201

TTTTAAATTAGCCGAAAAAAGTTAGCCAGGCATGGTGGCATGCACCTGTAGCCCCAGCTACTTGGGAGGCTGAGGTCGGAGGA  
AAAATTTAATCGGCCTTTTTTTCAATCGGTCCGTACCACCGTACGTGGACATCGGGGTCGATGAACCTCCGACTCCAGCCTCCT

12,750

PINK1

PINK1-201

PINK1-201

TCACCTTGAGCCTAGGAGTTAAGAGTCTGCAATGAGCTATGAATGTGCCACTGTACTCCAGCCTGGGCAGCAGAGTGAGATCCTAT  
AGTGAACCTCGGATCCTCAATTCTCAGACGTTACTCGATACTTACACGGTGACATGAGGTCGGACCCGTCGTCTCACTCTAGGATA

12,835

PINK1

PINK1-201

PINK1-201

CTCAAAAAATAATAAAAAATAATAAAGTAAAAGAGAAGTAGACTTTAGCTCATTATAAAAAATAACTTTTCGGCCGGGGGTAGTG  
GAGTTTTTTTATTATTTTTTATTATTTTCATTTTCTCTTCATCTGAAATCGAGTAATATTTTTTATTGAAAGCCGGCCCCCATCAC

12,920

PINK1

PINK1-201

PINK1-201

GCTCACGCCTGTAATCCCAGCACTTTGAGAGGCTGAGGCGGGCAGATCATGAGGTCAAGAGATCGAGACCATCCTGGCCAACATG  
CGAGTGCGGACATTAGGGTCGTGAAACTCTCCGACTCCGCCGTCTAGTACTCCAGTTCTCTAGCTCTGGTAGGACCGGTTGTAC

13,005

PINK1

PINK1-201

PINK1-201

GTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCTGGGCATGGTGGCGGGCGCCTGTAATCTCAGCTACTTGGGAAGCTGAG  
CACTTTGGGGTAGAGATGATTTTTATGTTTTTAATCGACCCGTACCACCGCCCGCGGACATTAGAGTCGATGAACCCCTTCGACTC

13,090

PINK1

PINK1-201

PINK1-201

GCAGGAGAATTGCTTGAACCCGGGAGGCGGAGGTTGTAGTGAGCCGAGATTGTGCCACTGCATTCCAGCCTGGCGACAGAGTGAG  
CGTCCTCTTAACGAACTTGGGCCCTCCGCCTCCAACATCACTCGGCTCTAACACGGTGACGTAAGGTCGGACCGCTGTCTCACTC

13,175

PINK1

PINK1-201

PINK1-201

AGTCCATCTCAAAATAAATTAATTAATTAATTAATTTTTCAAACAATGAAAGCTGTCCAAATGTAAGCCCAGTTGCCTCTGGAA  
TCAGGTAGAGTTTTATTTAATTAATTAATTAATTTAAAAAGTTTGTACTTTTCGACAGGTTTACATTTCGGGTCAACGGAGACCTT

13,260

PINK1

PINK1-201

PINK1-201

ATGAGTTGCCTACCACTGGAAGCATTCAAGTAGAAGCTGAATGGCCACTTGCCTAGGAAAATTGTAAGGAGATTCATACATCTGA  
TACTCAACGGATGGTGACCTTCGTAAGTTCATCTTCGACTTACCGGTGAACGGATCCTTTTAAACATTCTCTAAGTATGTAGACT

13,345

PINK1

PINK1-201

PINK1-201



TAAATTTTGAAGTAGAAGATTTAAAAATAATTGACTAGAGGAACTGGCTTTTATTATTTCTTTATTTACTTATTTATTTAT  
ATTTAAAAAATTGATCTTCTAAATTTTATTAAGTATCTCCTTGACCGAAAAATAATAAGAAAAATAATAAATGAATAAATAAATA

13,430

PINK1

PINK1-201

PINK1-201

TTATTTATTTGAGACAGAATCTTGCTTTGTTGCCAGGCTGGAGTGCAGTGGCGCCATCTCAGCTCACTGCAACCTCTGCTTCCC  
AATAAATAAACTCTGTCTTAGAACGAAACAACGGGTCCGACCTCACGTACC CGGTTAGAGTCGAGTGACGTTGGAGACGAAGGG

13,515

PINK1

PINK1-201

PINK1-201

AGGTTCAAGCAATTCTCGTGCCTCCGCCTCCTGAGTAGCTAGGATTACAGGCAGGTGCCACCACGCCTAGCTAATTTTTGATTTT  
TCCAAGTTCGTTAAGAGCACGGAGGCGGAGGACTCATCGATCCTAATGTCCGTCCACGGTGGTGC GGATCGATTAAAACTAAAA

13,600

PINK1

PINK1-201

PINK1-201

TTTTTTTTTTTTTTTTTTGAGACTGAGTCTCGCTCTGTCAACCAGGCTGGAGTGCAATGGCATGATCTCGGCTCACTGCAAGCTCT  
AAAAAAAAAAAAAAAAAACTCTGACTCAGAGCGAGACAGTGGGTCCGACCTCACGTTACCGTACTAGAGCCGAGTGACGTTTCGAGA

13,685

PINK1

PINK1-201

PINK1-201

ACCTCCCAGGTTACACCATTCTCCTGCTTCAGCCTCCCGAGTAGCTGGGACTACAGGCGCCACCACCACGCCCGGCTAATTTT  
TGGAGGGTCCAAGTGTGGTAAGAGGACGAAGTCGGAGGGCTCATCGACCCTGATGTCCGCGGGTGGTGGTGC GGCCGATTAAAA

13,770

PINK1

PINK1-201

PINK1-201

TTTGTATTTTATGACAGACGGGGTTTACCATGTTAGCCAGGATGGTCTCTATCTCCTGACTTCGTGATCCACCTGCTTCGGCC  
AAACATAAAAAATCATGTCTGCCCAAAGTGGTACAATCGGTCTACCAGAGATAGAGGACTGAAGCACTAGGTGGACGAAGCCGG

13,855

PINK1

PINK1-201

PINK1-201

TCCCAAAGCGCTGGGATTATTATTTTATGTTGGAGATGGGGTTTCACTGTTGGCCAGGCTGGTCTCAAACCTCCTGGCCTCAAGTGA  
AGGGTTTCGCGACCCTAATAATAAAAAATCACCTCTACCCCAAAGTGACAACCGGTCCGACCAGAGTTTGAGGACCGGAGTTCACT

13,940

PINK1

PINK1-201

PINK1-201

TCCACCCACCTCAGCCTCCAAAATGTTGGGATTACAGGTATGAGCCACCACGCCAGCTGGGAGTTGGCTTTTTTTTTTTTTTTTT  
AGGTGGGTGGAGTCGGAGGTTTTACAACCCCTAATGTCCATACTCGGTGGTGCGGGTCGACCCTCAACCGAAAAAAAAAAAAAA

14,025

PINK1

PINK1-201

PINK1-201

TTTTTTGAGACGGAGTCTCACTCTGTCGCCAGGCTGGAGTGCAGTGGCATGATCTTGGCTCACTGCAACCCCTGCCTATCGGGT  
AAAAAACTCTGCCTCAGAGTGAGACAGCGGGTCCGACCTCACGTACCGTACTAGAACCAGGTGACGTTGGGGACGGATAGCCCA

14,110

PINK1

PINK1-201

PINK1-201

TCAAGCAATTCTCCCGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACACGCCACTACACCTGGCTGATTTTTGTATTTTTAG  
AGTTCGTTAAGAGGGCGGAGTCGGAGGACTCATCGACCCTAATGTCCGTGTGCGGTGATGTGGACCGACTAAAAACATAAAAAATC

14,195

PINK1

PINK1-201

PINK1-201

TAGAGACGGGGTTTTACCATGTTGGTCAGGCTGATCTGGAACCTCTGACTTCGTGATCCGCCTGCCTCGGCCTCCCAAAGTTCTG  
ATCTCTGCCCAAAGTGGTACAACCAAGTCCGACTAGACCTTGAGGACTGAAGCACTAGGCGGACGGAGCCGGAGGGTTTTCAAGAC

14,280

PINK1

PINK1-201

PINK1-201

GGATTACAGGCGTGAGCCACTGCGCCCAGCCAGGAACTGGCTTTTTAAAGGAATTTTGTGTGGACCCTTTTACAAATAACCAATT  
CCTAATGTCCGCACTCGGTGACGCGGGTCGGTCCTTGACCGAAAAATTTCTTAAACACACCTGGGAAAAATGTTTATTGGTTAA

14,365

PINK1

PINK1-201

PINK1-201

CTTTTTTATTTTTCTGAGACAGAGTCTCGCTGTGTTGCTCAGGCTGAAGTGATTCTCCTGTCTCAGCCTCCTTCACCTCCCAG  
GAAAAAATAAAAAAGACTCTGTCTCAGAGCGACACAACGAGTCCGACTTCACTAAGAGGACAGAGTCGGAGGAAGTGGAGGGTC

14,450

PINK1

PINK1-201

PINK1-201

GTTCAAGTAATTCTCCTGTCTCAGCCTCCCGAGTAGCTGGGATACAGGCACACACCACCATGCCTGGCTAGTTTTTTTTGTATTTT  
CAAGTTCATTAAGAGGACAGAGTCGGAGGGCTCATCGACCCTATGTCCGTGTGTTGGTGGTACGGACCGATCAAAAAACATAAAA

14,535

PINK1

PINK1-201

PINK1-201

TAGTAGAGACAGGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACCTCCTGACCTCAGGTGATCTACCCGCCTCGGCCTCCCAA  
ATCATCTCTGTCCCAAAGTGGTACAACCGGTCCGACCAGAACTTGAGGACTGGAGTCCACTAGATGGGCGGAGCCGGAGGGTTT

14,620

PINK1

PINK1-201

PINK1-201

ATGTTGGCATTACAGGCCACCACACCCGGCAATAACTGATTCTTAATGCACCTGGTTCTTAGGTTTGGATTTGGGGTTTTCAAATT  
TACAACCGTAATGTCCGGTGGTGTGGGCCGTTATTGACTAAGAATTACGTGGACCAAGAATCCAAACCTAAACCCCAAAGTTTAA

14,705

PINK1

PINK1-201

PINK1-201

CAAATCAAAGTCTCCTGGGGTATAAGGGCCCTTGGAGATCATTGAACCAAGCTCTAGCTCCTTTGGTCTTGGGGACAGCTCCAA  
GTTTAGTTTCAGAGGACCCCATATTCCCGGGAACCTCTAGTAAACTTGGTTCGAGATCGAGGAAACCAGAACCCTGTTCGAGGTT

14,790

PINK1

PINK1-201

PINK1-201

TTACTAGAACATGATTTAAATTGAGCCACACAGTCCTTTGCCTGGGGATTTTGCAGCCTGTACTTACTGGAGGCATTTCCGTGTT  
AATGATCTTGTACTAAATTTAACTCGGTGTGTCAGGAAACGGACCCCTAAAACGTCGGACATGAATGACCTCCGTAAAGGCACAA

14,875

PINK1

PINK1-201

PINK1-201

CGCACAGCAGGCCCTTCTGATCAGCTCTCAGGCCTTGCTGACCTCCTGGGCCAACACTGAGCCATTAGCCCCTGTCAGCTATGTC  
GCGTGTGTCGTCGGGAAGACTAGTCGAGAGTCCGGAACGACTGGAGGACCCGGTTGTGACTCGGTAATCGGGGACAGTCGATACAG

14,960

PINK1

PINK1-201

PINK1-201

TTGCTGGTGGCTTTAGTAGGGACATAGGAGGGCCTCTCAGAGGGAAGGAGGGGAGGAGAAATGGTCACTTTGCTTGTCTCTTCCC  
AACGACCACCGAAATCATCCCTGTATCCTCCCGGAGAGTCTCCCTTCCCTCCCTCCTCTTTACCAGTGAAACGAACGAGGAAAGGG

15,045

PINK1

PINK1-201

PINK1-201

AGACGGCTGCCCTGGCTGGTGATCGCAGATTTTGGCTGCTGCCTGGCTGATGAGAGCATCGGCCTGCAGTTGCCCTTCAGCAGC  
TCTGCCGACGGGGACCGACCACTAGCGTCTAAAACCGACGACGGACCGACTACTCTCGTAGCCGGACGTCAACGGGAAGTCGTCTG

15,130

PINK1

PINK1-201

ENSE00003662034

PINK1-201

375 D G C P W L V I A D F G C C L A D E S I G L Q L P F S S 400

TGGTACGTGGATCGGGGCGGAAACGGCTGTCTGATGGCCCCAGAGGTGAGTCCCGAGTGTGTCATGCGCCATCGGCAGCCCTTCC  
ACCATGCACCTAGCCCCGCCTTTGCCGACAGACTACCGGGGTCTCCACTCAGGGCTCACACAGTACGCGGTAGCCGTCGGGAAGG

15,215

PINK1

PINK1-201

W Y V D R G G N G C L M A P E

ENSE00003662034

PINK1-201

CCCACATGTCCACTGAATGCAGGAGACTCGATGCCTTGTGATAACCCAACACCTCCATCTTTTCTGACCCATAATTTGGCACAAG  
GGGTGTACAGGTGACTTACGTCTCTGAGCTACGGAACACTATTGGGTTGTGGAGGTAGAAAAGACTGGGTATTAAACCGTGTTTC

15,300

PINK1

PINK1-201

PINK1-201

TTCTTCCCTGCCACTTTGCTTTCTCCGGCGTTCCTCATGTTCCAGGAGAATGCAAGTCTGTACATAAACCAGGTGGTCTA  
AAGGAAGGGACGGTGAAACGAAAGGAGGCCGCAAGGGAGTACAAGGTCTCTTACGTTTCAGGACAGTGTATTTGGTCCACCAGAT

15,385

PINK1

PINK1-201

PINK1-201

AGCAGACCCCTTCTGGGTCTGAGCCACAGCTCAAGCTCTGGGTTCTTGGGACAGAGTTCAGATTAGCCCATGGATCAGGT  
TCGTCTGGGGAAGACCCAGACTCGGTGTGAGTTCGAGACCCAAGGAACCTGTCTCAAGTCTAATCGGGTACCTAGTCCA

15,470

PINK1

PINK1-201

PINK1-201

GATGTGCAGGACATGAAAAGGTTAGATGGGCGGGCAGCGTGATGTCTCACCCACTGCTTCTGAGCAGGTGTCCACGGCCCGTCTCT  
CTACACGTCCTGTACTTTTCCAATCTACCCGCCCGTGCCTACAGAGTGGGTGACGAAGACTCGTCCACAGGTGCCGGGCAGGA

15,555

PINK1

PINK1-201

V S T A R P  
ENSE00003524815

PINK1-201

GGCCCCAGGGCAGTGATTGACTACAGCAAGGCTGATGCCTGGGCAGTGGGAGCCATCGCCTATGAAATCTTCGGGCTTGCAATC  
CCGGGGTCCCGTCACTAACTGATGTGCTCGTTCCGACTACGGACCCGTCAACCTCGGTAGCGGATACTTTAGAAGCCC GAACAGTTAG

15,640

PINK1

PINK1-201

G P R A V I D Y S K A D A W A V G A I A Y E I F G L V N

ENSE00003524815

PINK1-201

CCTTCTACGGCCAGGGCAAGGCCACCTTGAAAGCCGCAGCTACCAAGAGGGCTCAGCTACCTGCACTGCCCGAGTCAGTGCCTCC  
GGAAGATGCCGGTCCCGTTCGGGTGGAACCTTCGGCGTCGATGGTTCTCCGAGTCGATGGACGTGACGGGCTCAGTCACGGAGG

15,725

PINK1

PINK1-201

P F Y G Q G K A H L E S R S Y Q E A Q L P A L P E S V P P

ENSE00003524815

PINK1-201

AGACGTGAGACAGTTGGTGAGGGGCACTGCTCCAGCGAGAGGGCCAGCAAGGTGAGGGCTGTCCCCGGCTTCGAGGGGGACGGTGTGGG  
TCTGCACTCTGTCAACCACTCCCCTGACGAGGTCGCTCTCCGGTCGTTCCACTCCGACAGGGGGCCGAAGCTCCCCTGCCACACCC

15,810

PINK1

PINK1-201

D V R Q L V R A L L Q R E A S K  
485 490 495

ENSE00003524815

PINK1-201

TAGAAACCTCTGTTCTCGTTCCAGAGTGAAGGTCAGGTTTGGGCCAGAGCCACAGTGACAGATCCTCTGTGTTAGGAAGGTAAAG  
ATCTTTGGAGACAAGAGCAAGGTCCTCACTTCCAGTCCAAACCCGGTCTCGGTGTCAGTGTCTAGGAGACACAATCCTTCCATTTTC

15,895

PINK1

PINK1-201

PINK1-201

GCTAGTTACAAGAGAACAAAAACAGATTTTAATGTAGGTAGGAGTAGGAGCACTAGCCACCACAGCATAGTCAGAATCCTAGCA  
CGATCAATGTTCTCTTGTGTTTTGTCTAAAATTACATCCATCCTCATCCTCGTGATCGGTGGTGTGATCAGTCTTAGGATCGT

15,980

PINK1

PINK1-201

PINK1-201

GTTCAACTCCTGTGGCTTTTTTAGTTGCTGAAAAAGTTGTTTCAGAGGCCAGACACGGTGGCTTACACCTATAATCACAGCACTTT  
CAAGTTGAGGACACCGAAAAAATCAACGACTTTTTCAACAAGTCTCCGGTCTGTGCCACCGAATGTGGATATTAGTGTGCTGAAA

16,065

PINK1

PINK1-201

PINK1-201

GGGAGGCTGAGGCGGGTGGATCACTTGGGACCAGGAGTTCCAGTCCAGCCTGGCCAACATGGTAAAACCCCGTCTGTACTAAAA  
CCCTCCGACTCCGCCACCTAGTGAACCCTGGTCTCAAGGTCAGGTCGGACCGGTTGTACCATTTTGGGGCAGACATGATTTTT

16,150

PINK1

PINK1-201

PINK1-201

TACAAAAATTAGCTGAGTGTGCTGGCACACGCCTGTAATTCCAGGTAICTGGGAGGCTGAAGCAGGAGAATCGTTTGAACCCTGG  
ATGTTTTTAATCGACTCACAGCACCGTGTGCGGACATTAAGGTCCATGAGCCCTCCGACTTCGTCTCTTAGCAAACCTTGGGACC

16,235

PINK1

PINK1-201

PINK1-201

AGGCAGAGGTTGCAGTGAGCCAAGATCGCGCCACTGCACTCTGGCCTAGGTGACAGTGCAAGTCTTTGTCTCAAAAAAAAAAAAA  
TCCGTCTCCAACGTCAGTCCGGTCTAGCGCGGTGACGTGAGACCGGATCCACTGTACAGTTCAGAAACAGAGTTTTTTTTTTTTT

16,320

PINK1

PINK1-201

PINK1-201

AAAAAAAAAGGCTATTCAGAGAGAGAAAAAGGAGGCATTTTTTGAGAAATGTTTAATGGAGATGTAGCTCATGGAAGCAGCTGAGAA  
TTTTTTTTTCCGATAAGTCTCTCTCTTTTTCTCCGTA AAAACTCTTTACAAATTACCTCTACATCGAGTACCTTCGTCGACTCTT

16,405

PINK1

PINK1-201

PINK1-201

CTGATCAGAGAGAGATGGAAAACATCTCCTGAGAGCAGATCTGGACATTGTGAAATTAATATAAAGGAATGCAAAGGCAGACCTA  
GACTAGTCTCTCTCTACCTTTTGTAGAGGACTCTCGTCTAGACCTGTAACACTTTAATTATATTTCTTACGTTTCCGTCCTGGAT

16,490

PINK1

PINK1-201

PINK1-201

TCCGAAGCCATAATTGGAGTGGCAGCTGGCTCAGGGGCAGGCTTAGTGCAAAGAGCTGAGCCATACCTGCACCCCAAGCACTGTTC  
AGGCTTCGGTATTAACCTCACCGTCGACCGAGTCCCGTCCGAATCACGTTTCTCGACTCGGTATGGACGTGGGGTCGTGACAAG

16,575

PINK1

PINK1-201

PINK1-201

TGCCACTCCGTTAACTGCTCTCTGTACGTGGCCTGCTATCTTGGTGCGCAGTGAAGGTTAGAACAACAGCTGCAACCAGTTATGA  
ACGGTGAGGCAATTGACGAGAGACATGCACCGGACGATAGAACCACGCGTCACTTCCAATCTTGTGTGTCGACGTTGGTCAATACT

16,660

PINK1

PINK1-201

PINK1-201

AATGATAGAGGAGACTACTTACCTGGTTCAAGGGACCAGATAGCTGTGCACAAGAGGCCACTAGGCTTTCCACCCAGGGGGAAAAGG  
TTACTATCTCCTCTGATGAATGGACCAAGTTCCTGGTCTATCGACACGTGTTCTCCGTGATCCGAAAAGGTGGGTCCCCCTTTCC

16,745

PINK1

PINK1-201

PINK1-201

CTATTTCAACAATGCATGCTGCCCATGCAGAGGTGTACACATGGAAAAGCTTGGAGCACGGGCAGGGGACAGGCAGTATTTGTC  
GATAAAGTTGTTACGTACGACGGGGTACGTCTCCACATGTGTACCTTTTTCGAACCTCGTGCCCGTCCCCTGTCCGTCATAAACAG

16,830

PINK1

PINK1-201

PINK1-201

ACCTGAGTGAAGGGCATCAGTAGGAGATAGGGTAGAGGAAGAATTGGGTTGGGACCAGAGAAGGGGAAGACCCTCACTAACAAAGC  
TGGACTCACTTCCCGTAGTCATCCTCTATCCCATCTCCTTCTTAACCCAACCCTGGTCTCTTCCCTTCTGGGAGTGATTGTTTCG

16,915

PINK1

PINK1-201

PINK1-201

AGGCTTTGGGTTGAGACTGTGTTAACAGATGTTCTAGCTACAGCTTCCCTTCTGTTGCAGAGACCATCTGCCCGAGTAGCCGCA  
TCCGAAACCCAACCTCTGACACAATTGTCTACAAGATCGATGTCGAAGGGAAGGACAACGTCTCTGGTAGACGGGCTCATCGGCCT

17,000

PINK1

PINK1-201

500  
R P S A R V A A  
ENSE00001543152

PINK1-201

AATGTGCTTCATCTAAGCCTCTGGGGTGAACATATTCTAGCCCTGAAGAATCTGAAGTTAGACAAGATGGTTGGCTGGCTCCTCC  
TTACACGAAGTAGATTTCGGAGACCCCACTTGTATAAGATCGGGACTTCTTAGACTTCAATCTGTTCTACCAACCGACCGAGGAGG

17,085

PINK1

PINK1-201

505 510 515 520 525 530  
N V L H L S L W G E H I L A L K N L K L D K M V G W L L

ENSE00001543152

PINK1-201

AACAATCGGCCGCCACTTTGTTGGCCAACAGGCTCACAGAGAAGTGTGTTGTGGAAACAAAAATGAAGATGCTCTTTCTGGCTAA  
TTGTTAGCCGGCGGTGAAACAACCGGTTGTCCGAGTGTCTCTTCAACAACACACCTTTGTTTTACTTCTACGAGAAAGACCGATT

17,170

PINK1

PINK1-201

535 540 545 550 555 560  
Q Q S A A T L L A N R L T E K C C V E T K M K M L F L A N

ENSE00001543152

PINK1-201

CCTGGAGTGTGAAACGCTCTGCCAGGCAGCCCTCCTCCTCTGCTCATGGAGGGCAGCCCTGTGATGTCCCTGCATGGAGCTGGTG  
GGACCTCACACTTTGCGAGACGGTCCGTCGGGAGGAGGAGACGAGTACCTCCCCTCGGGACACTACAGGGACGTACCTCGACCAC

17,255

PINK1

PINK1-201

565 570 575 580  
L E C E T L C Q A A L L C S W R A A L

ENSE00001543152

PINK1-201

AATTACTAAAAGAACATGGCATCCTCTGTGTCGTGATGGTCTGTGAATGGTGAGGGTGGGAGTCAGGAGACAAGACAGCGCAGAG  
TTAATGATTTTCTTGTACCGTAGGAGACACAGCACTACCAGACACTTACCACTCCCACCCCTCAGTCCCTCTGTTCTGTGCGCTCTC

17,340

PINK1

PINK1-201

AGGGCTGGTTAGCCGGAAAAAGGCCTCGGGCTTGGCAAATGGAAGAACTTGAGTGAGAGTTCAGTCTGCAGTCCTCTGCTCACAGA  
TCCCGACCAATCGGCCTTTTCCGGAGCCCGAACCGTTTACCTTCTTGAACTCACTCTCAAGTCAGACGTCAGGAGACGAGTGTCT

17,425

PINK1

PINK1-201

CATCTGAAAAGTGAATGGCCAAGCTGGTCTAGTAGATGAGGCTGGACTGAGGAGGGGTAGGCCTGCATCCACAGAGAGGATCCAG  
GTAGACTTTTCACTTACCGGTTTCGACCAGATCATCTACTCCGACCTGACTCCTCCCCATCCGGACGTAGGTGTCTCTCCTAGGTC

17,510

PINK1

PINK1-201

GCCAAGGCACTGGCTGTCAAGTGGCAGAGTTTGGCTGTGACCTTTGCCCTAACACGAGGAACTCGTTTGAAGGGGGCAGCGTAGC  
CGGTTCCGTGACCGACAGTCAACCGTCTCAAACCGACACTGGAAACGGGGATTGTGCTCCTTGAGCAAACCTTCCCCCGTCGCATCG

17,595

PINK1

PINK1-201

ATGTCTGATTTGCCACCTGGATGAAGGCAGACATCAACATGGGTCAGCACGTTTCAGTTACGGGAGTGGGAAATTACATGAGGCCT  
TACAGACTAAACGGTGGACCTACTTCCGTCTGTAGTTGTACCCAGTCGTGCAAGTCAATGCCCTCACCCTTTAATGTA CTCCGGA

17,680

PINK1

PINK1-201

GGGCCTCTGCGTTCCCAAGCTGTGCGTTCTGGACCAGCTACTGAATTATTAATCTCACTTAGCGAAAAGTGACGGATGAGCAGTAA  
CCCGGAGACGCAAGGGTTCGACACGCAAGACCTGGTCGATGACTTAATAATTAGAGTGAATCGCTTTCCTACTGCCTACTCGTCATT

17,765

PINK1

PINK1-201

GTAAGTAAGTGTGGGGATTTAAACTTGAGGGTTTCCCTCCTGACTAGCCTCTCTTACAGGAATTGTGAAATATTAATGCAAATT  
CATTTCATTACACCCCTAAATTTGAACTCCCAAAGGGAGGACTGATCGGAGAGAATGTCCTTAACACTTTATAATTTACGTTTAA

17,850

PINK1

PINK1-201

TACAACTGCAGATGACGTATGTGCCTTGAACCTGAATATTTGGCTTTAAGAATGATTCTTATACTCTGAAGGTGAGAATATTTTGT  
ATGTTGACGTCTACTGCATACACGGAACCTTGACTTATAAACCGAAATTCCTACTAAGAATATGAGACTTCCACTCTTATAAAACA

17,935

PINK1

PINK1-201

GGGCAGGTATCAACATTGGGGAAGAGATTTTCATGTCTAACTAACTAACTTTATACATGATTTTTAGGAAGCTATTGCCTAAATCA  
CCCGTCCATAGTTGTAACCCCTTCTCTAAAGTACAGATTGATTGATTGAAATATGTAATAAAAAATCCTTCGATAACGGATTTAGT

18,020

PINK1

PINK1-201

GCGTCAACATGCAGTAAAGGTTGTCTTCAACTGA  
CGCAGTTGTACGTCATTTCCAACAGAAAGTTGACT

3'

18,054

5'

PINK1

PINK1-201



Feature	Location	Size	Color	Symbol	Type
✓ <b>PINK1</b>	1 .. 18,054	18,054 bp	Grey	→	gene
/note	= gene <a href="#">ENSG00000158828</a> Protein coding				
✓ <b>PINK1-201</b>	1 .. 18,054	18,054 bp	Yellow	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000321556</a>				
✓ <b>PINK1-201</b>	92 .. 17,234	17,143 bp	Red	→	CDS
▶ 8 segments = 1746 bp					
/note	= coding sequence <a href="#">ENSP00000364204</a>				
/translation	= MAVRQALGRGLQLGRALLLRFTGKPGRAYGLGRPGPAA GCVRGERPGWAA GPGAEP RR VGLGLPNLRFFRQSVAGLAARLQRQFVVRAW GCAGPCGRAVFLAFGLGLG LIEEKQAESRRRAVSACQEIQ,,AIFTQKSKPGPDPLDTRRLQGFRLEEYLIQSIGKGC SAAVYEATMPTLPQNL EVTKSTGLLPGRGPGTSA PEGEQERAPGAPAFPLAIKMMWNIS,,AGSSSEAILNTMSQELVPASRVALAGEYGAVTYR,,KSKRGPQQLAPHP NIIRVLRAFTSSVPLLPGALVDYPDVLP SRLHPEGLGHGRTLFLVMKN,,YPC TLRQYLCVNT P SPRLAAMMLLQLLEGVDHLVQQGIAHRDLK SDNILVELDP,,DGCPWLVIADFGCCLADESIGLQLPFSSWYVDRGGNGCLMAPE,,VSTARPGPRAVIDYSKADA WAVGAIAYEIFGLVNPFY GQGKAHLESRSYQEAQLPALPESVPPDVRQLVRALLQREASK,,RPSARVAANV LHLSLWGEHILAKNLKLDKMGVWLLQQSAATLLANRLT 5'CGMTCATKMLLADNLECFALCQAALLCSWRAAL*				
<b>MIR6084</b>	222 .. 331	110 bp	Grey	→	gene
/note	= gene <a href="#">ENSG00000284005</a> miRNA				
<b>MIR6084-201</b>	222 .. 331	110 bp	Grey	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000622012</a> miRNA				
✓ <b>Donor Sequence SNV -&gt; Rev</b>	4582 .. 4681	100 bp	Blue	⇌	misc_feature
✓ <b>PAM</b>	4641 .. 4643	3 bp	Yellow	⇌	misc_feature
✓ <b>gRNA Protospacer Sequence</b>	4644 .. 4663	20 bp	Red	⇌	misc_feature
✓ <b>SNV</b>	4647 .. 4647	1 bp	Orange	⇌	misc_feature
/note	= SNV = A Rev = C				
<b>PINK1-203</b>	4672 .. 17,859	13,188 bp	Grey	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000492302</a> protein_coding_CDS_not_defined				
<b>PINK1-AS</b>	9200 .. 18,736	9537 bp	Grey	←	gene
/note	= gene <a href="#">ENSG00000117242</a> lncRNA				
<b>PINK1-AS-201</b>	9200 .. 18,736	9537 bp	Grey	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000451424</a> lncRNA				
<b>PINK1-202</b>	12,051 .. 18,053	6003 bp	Grey	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000400490</a> protein_coding_CDS_not_defined				

Primer	Length	Binding Sites	Tm	Date Added
✓ <b>PCR Forward</b>	25-mer	4386 .. 4410	57°C	May 5, 2023
/sequence	= CAATTTTACCCAGAAAAGCAAGCC			
	40% GC / 7603.0 Da			
✓ <b>Sanger Sequencing Primer</b>	20-mer	4465 .. 4484	56°C	May 5, 2023
/sequence	= TCTGATAGGGCAGTCCATTG			
	50% GC / 6148.1 Da			
✓ <b>Donor Template SNV -&gt; Rev</b>	100-mer	4582 .. 4681	83°C	May 5, 2023
/sequence	= CCCAGGTACCAAGTGCACCAGGAGAAGGGCAGGAGCGAGCTCCGGGGGCCCTGCCTTCCCCTTGGCCATCAAGATGATGTGGAAC			
	43% GC / 10000.9 Da			
✓ <b>gRNA Protospacer</b>	20-mer	4644 .. 4663	46°C	May 5, 2023
/sequence	= CCACATCATCTTGATGTCCA			
	45% GC / 6012.0 Da			
✓ <b>PCR Reverse</b>	25-mer	5404 .. 5428	58°C	May 5, 2023
/sequence	= ttaaaggaagagatccagttcccc			
	44% GC / 7659.1 Da			