

ASK2J00180_LRRK2_N2081D_E03_AB
3102 bp


| Start (0) | Ecori | SwaI |
| :---: | :---: | :---: |
| ATTTGCTCCTTGAAGGCTATGAATTCATACTTCGTTATATTTTTCTGGCTGCATATTTAAATTACTTTAACAATCATATAAGTTCTAAACGAGGAACTTCCGATACTTAAGTATGAAGCAATATAAAAAGACCGACGTATAAATTTAATGAAATTGTTAGTATATTCAAG |  |  |
|  |  |  |
|  |  |  |
| LRRK2 |  |  |
| LRRK2-201 |  |  |

ATTTGCTCCTTGAAGGCTATGAATTCATACTTCGTTATATTTTTCTGGCTGCATATTTAAATTACTTTAACAATCATATAAGTTC


ATTGTAAAAATTTTGGAAATAAAAAGGAAGATAAAATGCACAGATAATTTTAGCAAATGAAATAATAATTATATTGGGATGTATT

| 1180 | \| 190 | - 200 | - 210 | - 220 | - 230 | - 240 | - 250 | $\cdots$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TCTTCCTAGATTTTAATTATGTACATTCCCATCAACTTTTTATTTTGAAAATGTTTAAGCCTAAAGAACAGTTGAAAGAGTAGTA AGAAGGATCTAAAATTAATACATGTAAGGGTAGTTGAAAAATAAAACTTTTACAAATTCGGATTTCTTGTCAACTTTCTCATCAT |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |



| "171 350 | 「11 \| 360 | -10 \| 370 | -17 \| 380 | " - \| 390 | -174 400 | "い1\| 410 | - \| 420 | $\ldots 1$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | PvuII <br> MspA1I | AleI |  |  |

ACCAGCCTGACCAACATGGTGAAACCCTGTCACTACTAAAAATACAAAAATCAGCTGGGCACGGTGGTGGGCACCTGTAATCCCA
 TGGTCGGACTGGTTGTACCACTTTGGGACAGTGATGATTTTTATGTTTTTAGTCGACCCGTGCCACCACCCGTGGACATTAGGGT


ACCAGCCTGACCAACATGGTGAAACCCTGTCACTACTAAAAATACAAAAATCAGCTGGGCACGGTGGTGGGCACCTGTAATCCCA

Aval
Bsobi
GCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGCAGAGGTTGCAGTAAGCCAAGATCACACCCCTGCACTCCA
CGATGAGCCCTCCGACTCCGTCCTCTTAGCGAACTTGGGTCCTCCGTCTCCAACGTCATTCGGTTCTAGTGTGGGGACGTGAGGT
LRRK2 $>$

GCCTGGGCAAGAGAGTGAGACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAGAAAGAAAGAGTAGTACAATATACATTCATACT
 CGGACCCGTTCTCTCACTCTGAGGTAGAGTTTTTTTTTTTTTTTTTTTTTTTCTTTCTTTCTCATCATGTTATATGTAAGTATGA


GCCTGGGCAAGAGAGTGAGACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAGAAAGAAAGAGTAGTACAATATACATTCATACT

| 7.600 | - \| 610 | - ${ }^{\text {a }}$ - 620 | -1 \| 630 | - 1 \| 640 | "17 \| 650 | 171 \| 660 | - 1 - 670 | 1-1 \| 680 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CATATACCCGACGCATAAATTCATTGATtATtTACTTTTTGCCCTACTTGTTCTTTCTTGCTCTCTTTGCGTATGAATGAATCAT <br> GTATATGGGCTGCGTATTTAAGTAACTAATAAATGAAAAACGGGATGAACAAGAAAGAACGAGAGAAACGCATACTTACTTAGTA |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |

## CATATACCCGACGCATAAATTCATTGATTATTTACTTTTTGCCCTACTTGTTCTTTCTTGCTCTCTTTGCGTATGAATGAATCAT

| M1 1-690 | -17700 | $\cdots 710$ | -17 720 | -4.730 | -1. 740 | $\cdots 750$ | " ${ }^{\text {- }} 760$ | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TGAAATTAAGTTGTAGACATCATGCCATATCACCTCTGAACAGTGTGTATATTTCTTTAGAATAAGGATGTTTACTTACATAATC <br>  ACTTTAATTCAACATCTGTAGTACGGTATAGTGGAGAC |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |

TGAAATTAAGTTGTAGACATCATGCCATATCACCTCTGAACAGTGTGTATATTTCTTTAGAATAAGGATGTTTACTTACATAATC

| 7770 | 「- 780 | 11.\|| 790 | - \| 800 | $\cdots 1{ }^{\text {- }} 810$ | - ${ }^{\text {a }}$ | $\cdots 1{ }^{1} 830$ |  | 17\| 850 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ATAATACCATTATCACAGCTAAGAAAATTAATTCAGTTGATTTTTTCCACATATTTGATAACTTTCTGTCTATCCACGATTATGT TATTATGGTAATAGTGTCGATTCTTTTAATTAAGTCAACTAAAAAAGGTGTATAAACTATTGAAAGACAGATAGGTGCTAATACA |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |


Bstz171
CTTACATATTCTTTTAATTTATGTCATAGCATATCATCTTAGAAAGTGATCCCTAAGTTACTGCATGGTATACATTGTTTAACCA
GAATGTATAAGAAAATTAAATACAGTATCGTATAGTAGAATCTTTCACTAGGGATTCAATGACGTACCATATGTAACAAATTGGT

| LRRK2 |
| ---: |
| LRRK2-201 |

CTTACATATTCTTTTAATTTATGTCATAGCATATCATCTTAGAAAGTGATCCCTAAGTTACTGCATGGTATACATTGTTTAACCA

| TTTCCCTTTGTGATTGGATGTCTTTAGGTTGATTATATTTTTATTATTATCACAAATGTTGAAATCACTCTTTTTTTCTGAAGAA |
| :--- |
| AAAGGGAAACACTAACCTACAGAAATCCAACTAATATAAAAATAATAATAGTGTTTACAACTTTAGTGAGAAAAAAAGACTTCTT |


| LRRK2 |
| ---: |
| LRRK2-201 |

TTTAAAAGTAATTTATCTGTCTTATGGAATAAAATATTTATTTCCCCTTAAAAGAATTTCAGGCATGAACCCAAGAGAGAAGGCT

| 1110 | -11.\| 1120 | " $11 \mid 1130$ | 「1.\| 1140 |  |  | 「11 1170 | $\cdots 171180$ | \| 1190 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TTTTTTTTTGTTTTAGTTGTTGTTTTTATTTTTATTTTTTATTTTTTGGGTAGAAGGAGCAGAGAGACAAGTTCAGGAAATAATG <br>  AAAAAAAAACAAAATCAACAACAAAAATAAAAATAAAAAATAAAAAACCCATCTTCCTCGTCTCTCTGTTCAAGTCCTTTATTAC |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |

## TTTTTTTTTGTTTTAGTTGTTGTTTTTATTTTTATTTTTTATTTTTTGGGTAGAAGGAGCAGAGAGACAAGTTCAGGAAATAATG

| $\cdots 1200$ | [ 1210 | \|- | 1220 | - \| 1230 | " ${ }^{1} 1240$ | - 11250 | (1260 | " \| 1270 | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MmeI | PCR F CAGGTTAAAGT | orward GAGTTGGAG | GAAG |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
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| LRRK2 |
| ---: |
| LRRK2-201 |

AGAGTGTTAGAATTTTGTTCAGGTTAAAGTGAGTTGGAGTGAAGTTTAGAAATCTCCTTTCTACTCATCTCTCCTGTTTTTAAAA

| - 1280 | - ${ }^{\text {- }} 1290$ | $\cdots \quad 1300$ | $\cdots 1{ }^{\text {a }}$ | $\cdots 1320$ | - \| 1330 | -1. 1340 | $\cdots 1350$ | \|-1360 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CACTGTCCTGGAAATAGTTAATATTAGGAACGAGAAAAATGGTATAGGTTTTCCTAGTACACTTTATTTCTTAATTATGAAATTC GTGACAGGACCTTTATCAATTATAATCCTTGCTCTTTTTACCATATCCAAAAGGATCATGTGAAATAAAGAATTAATACTTTAAG |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |

CACTGTCCTGGAAATAGTTAATATTAGGAACGAGAAAAATGGTATAGGTTTTCCTAGTACACTTTATTTCTTAATTATGAAATTC

| [ 1370 | -191380 | \|| 1390 | [ ${ }^{1400}$ | 1410 | -1420 | 1430 | 1440 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

TACTTAATAACTTACCATTGAATGTTTATCCTTATTATCATTCAAGGTAATTTTATTGAAGATTGAAGATATTTATAATAAAGAT + $+\boldsymbol{+}$ ATGAATTATTGAATGGTAACTTACAAATAGGAATAATAGTAAGTTCCATTAAAATAACTTCTAACTTCTATAAATATTATTTCTA

| LRRK2 |
| ---: |
| LRRK2-201 |

## TACTTAATAACTTACCATTGAATGTTTATCCTTATTATCATTCAAGGTAATTTTATTGAAGATTGAAGATATTTATAATAAAGAT

| 1450 | \| 1460 | - 1470 | \| 1480 | 1490 | \| 1500 | - 1510 | \| 1520 | -1530 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | HincII |  |  |  |  | Acc 651 |
| TGAAGGATTTTATTGTCCTGTGTGGTCAACCTTGGGGGGTGAGATGTTATGAGACAGGACAATTAATTGACTTGATCAAGGTACC <br>  ACTTCCTAAAATAACAGGACACACCAGTTGGAACCCCCCACTCTACAATACTCTGTCCTGTTAATTAACTGAACTAGTTCCATGG |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |

TGAAGGATTTTATTGTCCTGTGTGGTCAACCTTGGGGGGTGAGATGTTATGAGACAGGACAATTAATTGACTTGATCAAGGTACC

TTGTTATAAAAATAACACAGCCTGGTTTAGAACATCTCTTCCTGACTCTCTTATTTGGCATATAGCCTAAGTGTATGCCTCCTTG
 AACAATATTTTTATTGTGTCGGACCAAATCTTGTAGAGAAGGACTGAGAGAATAAACCGTATATCGGATTCACATACGGAGGAAC


TTGTTATAAAAATAACACAGCCTGGTTTAGAACATCTCTTCCTGACTCTCTTATTTGGCATATAGCCTAAGTGTATGCCTCCTTG


Sanger Sequencing Primer


GATGTATGAGCCCTGATGTTGGTCATATTTATTATTTTATCTGCTTACTTTCAGGGTTTCGTGCACCTGAAGTTGCCAGAGGAAA
 CTACATACTCGGGACTACAACCAGTATAAATAATAAAATAGACGAATGAAAGTCCCAAAGCACGTGGACTTCAACGGTCTCCTTT

| LRRK2 |  |  |
| :--- | :--- | :--- |
|  | LRRK2-201 |  |

GATGTATGAGCCCTGATGTTGGTCATATTTATTATTTTATCTGCTTACTTTCAGGGTTTCGTGCACCTGAAGTTGCCAGAGGAAA


Donor Template WT -> SNV
GTTTACTACTCTATGACATTTTGACAACTGGAGGTAGAATAGTAGAG
TGTCATTTATAACCAACAGGCTGATGTTTATTCATTTGGTTTACTACTCTATGACATTTTGACAACTGGAGGTAGAATAGTAGAG
 ACAGTAAATATTGGTTGTCCGACTACAAATAAGTAAACCAAATGATGAGATACTGTAAAACTGTTGACCTCCATCTTATCATCTC


Donor Sequence WT $\rightarrow$ SNV
TGTCATTTATAACCAACAGGCTGATGTTTATTCATTTGGTTTACTACTCTATGACATTTTGACAACTGGAGGTAGAATAGTAGAG


GGTTTGAAGTTTCCAAATGAGTTTGATGAATTAGAAATACAAGGAAAATTACCTGGTAAGTTCTGTTTTCTCTACAATGAAGATT


| T 1960 | "1 \|| 1970 | (1) \| 1980 | - $\mid$ \| 1990 | - 1 \| ${ }^{\text {a }}$ | - $1{ }^{\text {a }} 2010$ | - 1 \| ${ }^{\text {a }}$ | - $11 .\| \| 2030$ | 1. \|| 2040 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EcoNI |  |  |  |  |  |  |  |  |
| AGTGCATAAATATTCTTAAATCTTGTGATATATTAATAAAAATCACCTGAAAAAGGTAGCAGTTTTAGGCTTTTTAAAAAATCCG <br>  TCACGTATTTATAAGAATTTAGAACACTATATAATTATTTTTAGTGGACTTTTTCCATCGTCAAAATCCGAAAAATTTTTTAGGC |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |

AGTGCATAAATATTCTTAAATCTTGTGATATATTAATAAAAATCACCTGAAAAAGGTAGCAGTTTTAGGCTTTTTAAAAAATCCG

| $\cdots 2050$ | - \| 2060 | - - \| 2070 | - \| 2080 | - \| ${ }^{-1090}$ | - \| 2100 | - ${ }^{\text {- } 2110}$ | - ${ }^{\text {a }}$ - 2120 | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAATTAATATTGGTGTAGTTAATATTATATTTAGAAACATAGAGAAGGAAATTGCTGTTAGAACTCCACATTTGGTGATTTTTAA GTTAATTATAACCACATCAATTATAATATAAATCTTTGTATCTCTTCCTTTAACGACAATCTTGAGGTGTAAACCACTAAAAATT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |
| CCTTTAACGACAATCTTGAGGTGTA |  |  |  |  |  |  |  |  |
|  |  |  |  |  | PCR Reverse |  |  |  |



## TTTTCATAAAGAATTACTGTGTACTCATTATCCTGGAATGTTTTCGTTTTCTTGGAGTGAAATAATTTACATGCAGGAATGGAAG

| －－｜ 2220 |  | －｜｜ 2240 | $\cdots 1.102250$ | ＂ $1 . \mid$｜ 2260 | ＂•1｜ 22270 | $\cdots 1{ }^{\text {－}}$ | ＂＂｜ 22290 | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BbsI |  |  |  |  |  |  |  |  |
| ACTGAATGATCTATAATAATAATTTTTCATAAGAATCGGTAAATGTGTATTTAATGTTATCAAAGCTCATTTGGAATGGTTGTCT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| TGACTTACTAGATATTATTATTAAAAAGTATTCTTAGCCATTTACACATAAATTACAATAGTTTCGAGTAAACCTTACCAACAGA |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2－201 |  |  |  |  |  |  |  |  |

ACTGAATGATCTATAATAATAATTTTTCATAAGAATCGGTAAATGTGTATTTAATGTTATCAAAGCTCATTTGGAATGGTTGTCT

| 2300 | ［ 2310 | 1＂2320 | ｜＂ 2330 | ［ 2340 | ＂｜ 2350 | ｜${ }^{2360}$ | 1 ${ }^{\text {2 }} 2370$ | 1］2380 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CATGCTTTCAAGAAATTAGAGGACTTTGTAATTCATTCCTTAACCATTACTTTAGTTCTCACCACAAAATAACATTTTAAGTTTA GTACGAAAGTTCTTTAATCTCCTGAAACATTAAGTAAGGAATTGGTAATGAAATCAAGAGTGGTGTTTTATTGTAAAATTCAAAT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2－201 |  |  |  |  |  |  |  |  |

CATGCTTTCAAGAAATTAGAGGACTTTGTAATTCATTCCTTAACCATTACTTTAGTTCTCACCACAAAATAACATTTTAAGTTTA

| 11．｜ 2390 | 1＇2400 | ［＂ 2410 | 1＂ 2420 | 1． 2430 | 1］ 2440 | 1＂ 2450 | 1＂2460 | － 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DraIII |  |  |  |  |  |  |  |  |
| TTTAGCTCTTTCTCATATTTTCTGCTTTCCCTTTCATTTAAAAAATACTTTTGAGTGTACACAATGTGCCATGTACAGGAAATAG |  |  |  |  |  |  |  |  |
| ＋＋＋＋1＋－＋ | ＋＋－＋－＋－ | ＋＋卜＋1＋－＋ | ＋＋＋＋1＋－＋ | Н＋卜＋1＋1＋ | ＋1＋＋1＋＋ | ＋＋＋＋1＋1＋ | ＋十＋1＋－1＋ | ＋＋＋＋ |
| AAATCGAGAAAGAGTATAAAAGACGAAAGGGAAAGTAAATTTTTTATGAAAACTCACATGTGTTACACGGTACATGTCCTTTATC |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2－201 |  |  |  |  |  |  |  |  |
| TTTAGCTCT | TCTCATATT | TCTGCTTTC | CtTtCATTT | AAAAAATACT | TTTGAGTGTA | CACAATGTGC | ATGTACAGGA | AAATAG |


| 2470 | － 2480 | ｜ 2490 | ｜ 2500 | 2510 | ｜ 2520 | ｜ 2530 | － 2540 | 2550 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

AGCTTTATCTTTTTTGGGTATAACTTCAAGATCATGGCAAAAGAAAACTTATTATTAATTGGATAAACCTTAGATATAATCTAGG H＋H HبץبН TCGAAATAGAAAAAACCCATATTGAAGTTCTAGTACCGTTTTCTTTTGAATAATAATTAACCTATTTGGAATCTATATTAGATCC


AGCTTTATCTTTTTTGGGTATAACTTCAAGATCATGGCAAAAGAAAACTTATTATTAATTGGATAAACCTTAGATATAATCTAGG

TTGGGAGGCCCAGGCAGGCAGATCACTTGAGGCCAGGAGCTGGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAA بНННبН AACCCTCCGGGTCCGTCCGTCTAGTGAACTCCGGTCCTCGACCTCTGGTCGGACCGGTTGTACCACTTTGGGACAGAGATGATTT
LRRK2

TTGGGAGGCCCAGGCAGGCAGATCACTTGAGGCCAGGAGCTGGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAA

AATACAAAAAGTAGCTGGGCATGGTGGCATGTGCGTGTAGTCCCAGCTACCAAGGAGGCTGAGGCACGAGAATAGCTTGAACCTG

| 2810 | " \| 2820 | " "\| 2830 | \| " 2840 | \| 2850 | " \| 2860 | \| " 2870 | \| 2880 | 2890 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GGAGGTTGCAGTGAGCCGAGATTGCGCCACTGCACTCCAGCCTAAGCAACAAAGTGAGACTCCATCTTAAAAAAAAAAATTCAGT CCTCCAACGTCACTCGGCTCTAACGCGGTGACGTGAGGTCGGATTCGTTGTTTCACTCTGAGGTAGAATTTTTTTTTTTAAGTCA |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |



TCTGTGTTCTGCATCAACCAGAATAAGCTACGCCTCTTATAAAAAACAAATGTGCACAAACCATCTGTGAGGACATAAGGATTAA بץبН AGACACAAGACGTAGTTGGTCTTATTCGATGCGGAGAATATTTTTTGTTTACACGTGTTTGGTAGACACTCCTGTATTCCTAATT

| LRRK2 |
| :---: |
| LRRK2-201 |

TCTGTGTTCTGCATCAACCAGAATAAGCTACGCCTCTTATAAAAAACAAATGTGCACAAACCATCTGTGAGGACATAAGGATTAA

| 2980 | "- \| 2990 | "17"\| 3000 | -1 \|| 3010 |  | "17 \| 3030 | " 1 \| ${ }^{\text {a }} 3040$ | " 3050 | 101 | \| ${ }^{1} 3060$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | HindIII |  |  |  | BfuAI BspMI |  |
| ATGCTTGCTTACTTTGAGTATTAAAATAAAAAGTAGAAGCTTTATTATATGAGTAAAAGTGTTTCCAAAGTCTATTTGAAATGCA |  |  |  |  |  |  |  |  |  |
| +++-H | ++++++-+ | +-+1++-+ | ++-++-+ | +-+-++- | H+-+++-1 | +++-+-+ | ++++++-+ | ++-+ | ++++ |
| TACGAACGAATGAAACTCATAATTTTATTTTTCATCTTCGAAATAATATACTCATTTTCACAAAGGTTTCAGATAAACTTTACGT |  |  |  |  |  |  |  |  |  |
| LRRK2 |  |  |  |  |  |  |  |  |  |
| LRRK2-201 |  |  |  |  |  |  |  |  |  |

LRRK2

| LINC02471 |  |
| :--- | :--- |
| /note | $=\underset{\text { gene ENSG00000223914 }}{\text { IncRNA }}$ |

LRRK2

/note $=$| gene ENSG00000188906 |
| :--- |
| Protein coding |

LINC02471-202

/note $=$| primary transcript ENST00000641941 |
| :--- |
|  |
| IncRNA |

| LRRK2-201 |  |
| :--- | :--- |
| /note $=$ | primary transcript ENST000000298910 |
| LRRK2-204 |  |
| /note $=$ | primary transcript ENST000000430804 <br>  <br> Nonsense mediated decay |


| LRRK2-206 |  |
| :--- | :--- |
| /note | $=$primary transcript ENST00000479187 <br> Retained intron |


| LRRK2-210 |  |
| :--- | :--- |
| /note | $=\quad$primary transcript ENST00000679360 <br>  <br>  <br>  <br> Nonsense mediated decay |


| LRRK2-211 |  |
| :--- | :--- |
| /note | $=\quad$primary transcript ENST00000679532 <br>  <br>  <br> Nonsense mediated decay |


| LRRK2-213 |  |
| :--- | :--- |
| /note | $=$primary transcript ENST00000680018 <br>  <br>  <br> Nonsense mediated decay |


| LRRK2-215 |  |
| :--- | :--- |
| /note | $=\quad$primary transcript ENST000000680422 <br>  <br>  <br> Nonsense mediated decay |


| LRRK2-216 |  |
| :--- | :--- |
| /note $=$ | primary transcript ENST00000680425 <br>  <br>  <br> Nonsense mediated decay |


| LRRK2-217 |  |
| :--- | :--- |
| /note | $=\quad$primary transcript ENST00000680453 <br>  <br>  <br>  <br>  <br> Nonsense mediated decay |

LRRK2-218
/note $=$ primary transcript ENST00000680790

| LRRK2-219 |  |
| :--- | :--- |
| /note | $=$primary transcript ENST00000681136 <br> protein_coding_CDS_not_defined |


| LRRK2-220 |  |
| :--- | :--- |
| /note | $=$ primary transcript ENST00000681696 |


| LRRK2-212 |  |
| :--- | :--- |
| /note | $=$primary transcript ENST00000679683 <br>  <br>  <br>  <br> Nonsense mediated decay |


| LRRK2-201 |  | 1670 .. 1840 | 171 bp | $\square$ | CDS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /codon_start | 1 |  |  |  |  |
| /note | coding sequence ENSP00000298910 |  |  |  |  |
| /translation | FRAPEVARGNVIYNQQADVYSFGLLLY <br> 57 amino acids $=6.3 \mathrm{kDa}$ | RIVEGLKFPNE | IQGKLP |  |  |
| LRRK2-218 |  | 1670 .. 1840 | 171 bp | $\square$ | CDS |
| /codon_start | 1 |  |  |  |  |
| /note | coding sequence ENSP00000505335 |  |  |  |  |
| /translation | FRAPEVARGNVIYNQQADVYSFGLLLYD <br> 57 amino acids $=6.3 \mathrm{kDa}$ | RIVEGLKFPNE | IQGKLP |  |  |


| Feature | Location | Size | \# | Type |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| LRRK2-220 | 1670 | .. | 1840 | 171 bp | $\square$ |$\rightarrow$ CDS

/codon_start = 1
/note $=$ coding sequence ENSP00000505871
/translation $=$ FRAPEVARGNVIYNQQADVYSFGLLLYDILTTGGRIVEGLKFPNEFDELEIQGKLP
57 amino acids $=6.3 \mathrm{kDa}$

| Donor Sequence WT -> SNV | 1739 | .. | 1838 | 100 bp | $\square$ | $\longmapsto$ | misc_feature |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| LRRK2-208 | 1764 | .. | 3102 | 1339 bp | $\square$ | $\longrightarrow$ | prim_transcript |

/note $=$ primary transcript ENST00000636518
LRRK2-208
1764 .. $1840 \quad 77$ bp
/note $=$ coding sequence ENSP00000490200
/translation $=$ NWR*NSRGFEVSK*V**IRNTRKIT
25 codons (4 internal stop codons)

| PAM | 1798 .. 1800 | 3 bp | $\square$ | misc_feature |
| :---: | :---: | :---: | :---: | :---: |
| gRNA Protospacer Sequence | 1801 .. 1820 | 20 bp | $\square$ | misc_feature |
| SNV | 1801 .. 1801 | 1 bp | $\square$ | misc_feature |



