Supplementary Figure 2

LRRN4(NM_152611)

MRQTLPLLLL	TVLRPSWADP	PQEKVPLFRV	TQQGPWGSSG	SNATDSPCEG
LPAADATALT	LANRNLERLP	GCLPRTLRSL	DASHNLLRAL	STSELGHLEQ
LQVLTLRHNR	IAALRWGPGG	PAGLHTLDLS	YNQLAALLPC	TGPALSSLRA
LALAGNPLRA	LQPRAFACFP	ALQLLNLSCT	ALGRGAQGGI	AEAAFAGEDG
APLVTLEVLD	LSGTFLERVE	SGWIRDLPKL	TSLYLRKMPR	LTTLEGDIFK
MTPNLQQLDC	QDSPALASVA	THIFQDTPHL	QVLLFQNCNL	SSFPPWTLDS
18mer SQVLSINLFG	NPLTCSCDLS	WLLTDAKRTV	LSRAADTMCA	PAAGSSGPFS
ASLSLSQLPG	VCQSDQSTTL	GASHPPCFNR	STYAQGTTVA	PSAAPATRPA
GDQQSVSKAP	NVGSRTIAAW	PHSDAREGTA	PSTTNSVAGH	SNSSVFPRAA
STTRTOHRGE	C+18	8mer ISAASTPLAS	KLLGPFPTSW	DRSISSPOPG
QRTHATPQAP	NPSLSEGEIP	VLLLDDYSEE	EEGRKEEVGT	PHQDVPCDYH
PCKHLQTPCA	ELQRRWRCRC	PGLSGEDTIP	DPPRLQGVTE	TTDTSALVHW
CAPNSVVHGY	QIRYSAEGWA	GNQSVVGVIY	ATARQHPLYG	LSPGTTYRVC
VLAANRAGLS	QPRSSGWRSP	CAAFTTKPSF	ALLLSGLCAA	SGLLLASTVV
LSACLCRRGQ	TLGLQRCDTH	L <mark>VAYKNPAFD</mark> C+19mer	DYPLGLQTVS	
* C20orf75-A:TLEGDIEKMTPNLOOLDC (18mer)				

- * C20orf75-A: TLEGDIFKMTPNLQQLDC (18mer)
- * C20orf75-B: C+AWPHSDAREGTAPSTTNS (19mer)
- * C20orf75-C: C+VAYKNPAFDDYPLGLQTVS (20mer)

Supplementary Figure 2 (continued)

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1.UPK3B isofrom a (NM 030570).gnu
2.UPK3B isofrom b (NM 182684).gnu
3.UPK3B isofrom c (NM 182683).qnu
1:MGLPWGQPHLGLQMLLLALNCLRPSLSLGEWGSWMDASSQTQGAGGPAGVIGPWAPAPLR 60
1:-----MGLPW 5
1:-----MGLPW 5
61:LGEAAPGTPTPVSVAHLLSPVATELVPYTPQITAWDLEGKVTATTFSLEQPRCVFDGLAS 120
6 : GQPHLGLQMLLLALNCLRPSLSLELVPYTPQITAWDLEGKVTATTFSLEQPRCVFDGLAS 65
6 :GOPHLGLOMLLLALNCLRPSLSLELVPYTPOITAWDLEGKVTATTFSLEOPRCVFDGLAS 65
  ************************
121: ASDTVWLVVAFSNASRGFONPETLADIPASPOLLTDGHYMTLPLSPDQLPCGDPMAGSGG 180
66 :ASDTVWLVVAFSNASRGFQNPETLADIPASPQLLTDGHYMTLPLSPDQLPCGDPMAGSGG 125
66 :ASDTVWLVVAFSNASRGFQNPETLADIPASPQLLTDGHYMTLPLSPDQLPCGDPMAGSGG 125
   *****************
          C+16mer
                                              20mer
181:APVLRVGHDHGCHQQPFCNAPLPGPGPYREDPRIHRHLARAAKWQHDRHYLHPLFSGRPP 240
126:APVLRVGHDHGCHQQPFCNAPLPGPGPYRVKFLLMDTRGSPRAETKWSDPITLHQGKTPG 185
126:APVLRVGHDHGCHQQPFCNAPLPGPGPYREDPRIHRHLARAAKWQHDRHYLHPLFSGRPP 185
   C+18mer
241:TLGLLGSLYHALLOPVVAGGGPGAAADRLLHGOALHDPPHPTORGRHTAGGLOAWPGPPP 300
186:SIDTWPGRRSGSMIVITSILSSLAGLLLLAFLAASTMRFSSLWWPEEAPEQLRIGSFMGK 245
186:TLGLLGSLYHALLOPVVAGGGPGAAADRLLHGOALHDPPHPTORGRHTAGGLOAWPGPPP 245
   C+18mer
301:QPQPLAWPLCMGLGEMGRRE-----
                                               320
246:RYMTHHIPPSEAATLPVGCKPGLDPLPSLSP
                                               276
246:QPQPLAWPLCMGLGEMGRRE-----
                                               265
   * UPK3B-A: C+SNASRGFQNPETLADI (17mer)
   * UPK3B-B: CGDPMAGSGGAPVLRVGHDH (20mer)
  * UPK3Bb-A: C+KFLLMDTRGSPRAETKWS (19mer)
   * UPK3Bb-B: C+EAPEOLRIGSFMGKRYMT (19mer)
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