

Data S1. Overview of the genes associated with chromosome congression defects analyzed in the present study, related to Figure 1.

Protein name	Subcellular localization	Chromosome congression defects described previously	Number of cells analyzed	Validation of depletion by WB	References
Nuf2_oligo1	Kinetochores	Prometaphase arrest; mitotic death	310 cells from 2 independent experiments	yes	S1-S3
Nuf2_oligo2			224 cells from 2 independent experiments	yes	
Beclin-1	kinetochores	Misaligned chromosomes; prometaphase arrest; mitotic death;	374 cells from 2 independent experiments	no	S4
CLIP-170	Kinetochores; mitotic spindle	Misaligned chromosomes; prometaphase arrest	311 cells from 2 independent experiments	no	S5,S6
ATRX_oligo1	Pericentromeric heterochromatin	Misaligned chromosomes; prometaphase arrest; abnormal nuclear morphology (lobulated nuclei and intranuclear DNA bridges); chromosome segregation defects (lagging chromosomes and chromosome bridges)	392 cells from 2 independent experiments	yes	S7
ATRX_oligo2	Pericentromeric heterochromatin	Misaligned chromosomes; prometaphase arrest; abnormal nuclear morphology (lobulated nuclei and intranuclear DNA bridges); chromosome segregation defects (lagging chromosomes and chromosome bridges)	400 cells from 2 independent experiments	yes	S7
SPICE	Mitotic spindle; centrioles	Misaligned chromosomes; multipolar spindles	504 cells from 2 independent experiments	no	S8,S9
CHICA	Mitotic spindle	Misaligned chromosomes, mitotic delay	380 cells from 2 independent experiments	no	S10,S11
CDCA4		Multipolar spindle	154 cells from 2 independent experiments	no	S12
Kif2a_oligo1	Spindle poles	Partial knockdown of Kif2a accumulated cells with misaligned chromosomes;	600 cells from 3 independent experiments	yes	S13,S14

		prometaphase delay; monopolar spindles			
Kif2a_oligo2	Spindle poles		600 cells from 3 independent experiments	yes	S14
HIP1r	Mitotic spindle	Misaligned chromosomes; mitotic delay	200 cells from 2 independent experiments	no	S15
Nucleophosmin (NPM1)	Chromosome periphery	Abnormal nuclear shape, tetraploid micronuclei formation; lost proliferation ability; Misaligned chromosomes; disorganized spindles; mitotic delay	329 cells from 3 independent experiments	no	S16
CENP-F/mitosin	kinetochore	Misaligned chromosomes; mitotic delay; aberrant spindle morphology, cell death	398 cells from 2 independent experiments	no	S17,S18
NudC	kinetochore	Misaligned chromosomes; prometaphase delay; Chromosome segregation defects (lagging chromosomes)	338 cells from 2 independent experiments	no	S19,S20
RRS1 (Regulator of Ribosome Synthesis 1)	Chromosome periphery	Misaligned chromosomes; prometaphase delay	397 cells from 2 independent experiments	no	S21
KIBRA	ND	Misaligned chromosomes; aberrant spindle morphology; Chromosome segregation defects (lagging chromosomes)	401 cells from 2 independent experiments	no	S22
Nucleolin	Nucleoli; chromosome periphery	Misaligned chromosomes; prometaphase delay; aberrant spindle morphology	150 cells from 2 independent experiments	no	23,24
DDA3_oligo1	Spindle microtubules; kinetochores; midbody	Misaligned chromosomes; prometaphase delay	399 cells from 2 independent experiments	no	S13,S25-S28
DDA3_oligo2	Spindle microtubules; kinetochores; midbody		383 cells from 2 independent experiments	no	S13,S25-S28
Bub1_oligo1	Kinetochore	Misaligned chromosomes; prometaphase delay; Chromosome segregation defects (lagging chromosomes)	400 cells from 2 independent experiments	yes	S29-S31
Bub1_oligo2			257 cells from 2 independent experiments	yes	
BubR1_oligo1	Kinetochore	Misaligned chromosomes; Chromosome segregation defects (lagging chromosomes)	620 cells from 3 independent experiments	yes	S32,S33

BubR1_oligo2			236 cells from 2 independent experiments	yes	
Ska3_oligo1	Kinetochores; mitotic spindle	Misaligned chromosomes, prometaphase delay, metaphase arrest, problems in maintenance of chromosome alignment, cohesion fatigue; cell death	343 cells from 2 independent experiments	yes	S34 S35-S38
Ska3_oligo2	Kinetochores; mitotic spindle		400 cells from 2 independent experiments	yes	
TPX2	Nucleus; spindle pole; spindle	Multipolar spindles; misaligned chromosomes	403 cells from 3 independent experiments	no	S39,S40
Nup188_oligo1	centrosomes	Misaligned chromosomes, prometaphase delay	500 cells from 3 independent experiments	no	S41
Nup188_oligo2	centrosomes		272 cells from 2 independent experiments	no	
Kif4a_oligo1	Chromosome arms; spindle midzone	Misaligned chromosomes; mitotic delay; spindle defects; chromosome mis-segregation (lagging chromosomes and chromosome bridges)	252 cells from 2 independent experiments	yes	S42
Kif4a_oligo2	Chromosome arms; spindle midzone		348 cells from 2 independent experiments	yes	
Zw10_oligo1	kinetochores	Misaligned chromosomes; prometaphase delay	899 cells from 5 independent experiments	yes	S43,S44
Zw10_oligo2			217 cells from 2 independent experiments	yes	
CENP-L	kinetochores	Chromosome alignment defects; chromosome mis-segregation (lagging chromosomes)	405 cells from 3 independent experiments	no	S45
NUSAP1	Central spindle	Aberrant mitotic spindle, chromosome alignment defects; defective chromosome segregation; cytokinesis failure	208 cells from 2 independent experiments	no	S46,S47
SAF-A/hnRNP-U	Spindle microtubules; spindle midzone	Aberrant mitotic spindles; Misaligned chromosomes; exit with misaligned chromosomes; prometaphase delay; cytokinesis failure	375 cells from 2 independent experiments	no	S48

Tastin/TROAP	Mitotic spindles in mitosis; centrosomes in interphase	Mitotic delay; Chromosome alignment defects; aberrant mitotic spindles; multipolar spindles	304 cells from 2 independent experiments	no	S49
Tankyrase-1	Centrosome	Mitotic delay; metaphase delay	566 cells from 3 independent experiments	no	S50,S51
Ska1_oligo1	Kinetochores; mitotic spindle	Misaligned chromosomes, prometaphase delay, metaphase arrest, problems in maintenance of chromosome alignment, cohesion fatigue; cell death	316 cells from 2 independent experiments	yes	S35,S37,S38,S52,S53
Ska1_oligo2			249 cells from 2 independent experiments	yes	
HURP	kinetochores	Misaligned chromosomes; prometaphase delay	296 cells from 2 independent experiments	yes	S54-S57
Aki1/CC2D1A	centrosome	Multipolar spindles due to spindle pole fragmentation	202 cells from 2 independent experiments	no	S58
4.1r	Mature centriole	Misaligned chromosomes; Multipolar spindles; Monopolar spindles	451 cells from 3 independent experiments	yes	S59
HICE1/HAUS8	Centrosome; mitotic spindle, spindle midzone; midbody	Misaligned chromosomes; mitotic delay; aberrant mitotic spindles; multipolar spindles, spindle pole fragmentation	377 cells from 2 independent experiments	no	S60,S61
Ska2	Kinetochores; mitotic spindle	Misaligned chromosomes, prometaphase delay, metaphase arrest, problems in maintenance of chromosome alignment, cohesion fatigue	399 cells from 2 independent experiments	yes	S35,S37,S52
Kif18a_oligo1	Plus-ends of KMTs	Misaligned chromosomes; prometaphase delay; long mitotic spindle; chromosomes mis-segregation (lagging chromosomes); Micronuclei formation	330 cells from 2 independent experiments	yes	S62-S67
Kif18a_oligo2			236 cells from 2 independent experiments	yes	
TACC3_oligo1	centrosome	Misaligned chromosomes; mitotic delay; disorganized spindles; cell death	360 cells from 3 independent experiments	yes	S68-S72
TACC3_oligo2			285 cells from 2	yes	

			independent experiments		
CLERC_Oligo1	Centrosomes	Misaligned chromosomes; multipolar spindles	294 cells from 2 independent experiments	yes	S73
CLERC_Oligo2	Centrosomes		400 cells from 2 independent experiments	yes	
Kizuna	Mature centriole; pericentriolar satellites	Misaligned chromosomes; multipolar spindles; spindle pole fragmentation	358 cells from 2 independent experiments	no	S74
ILK	Plasma membrane; focal adhesion; cytosol	Aberrant mitotic spindles, Misaligned chromosomes	300 cells from 3 independent experiments	no	S75
Kinastrin/SKAP	Spindle pole; Kinetochores	Prometaphase delay; metaphase delay; multipolar spindles; spindle pole fragmentation	355 cells from 2 independent experiments	no	S76-S79
Ninein	Mature centriole; pericentriolar satellites	Misaligned chromosomes; multipolar spindles	200 cells from 2 independent experiments	no	S80
NuMA	Nucleus; spindle pole	Aberrant mitotic spindles, Misaligned chromosomes	188 cells from 2 independent experiments	yes	S81,S82
Rae1_oligo1	Nuclear pore; spindle pole	Misaligned chromosomes; multipolar spindles; lagging chromosomes;	358 cells from 2 independent experiments	no	S83,S84
Rae1_oligo2			311 cells from 2 independent experiments	no	
RanBP2_oligo1	Nuclear pore; kinetochores; spindle pole	Misaligned chromosomes; multipolar spindles	400 cells from 2 independent experiments	no	S85
RanBP2_oligo2			231 cells from 1 experiment	no	
Spindly	Kinetochores; spindle pole	Misaligned chromosomes; prometaphase delay	600 cells from 3 independent experiments	no	S86,S87
STARD9	Daughter centriole	Misaligned chromosomes; mitotic delay; multipolar spindles; spindle pole fragmentation; mitotic death	198 cells from 2 independent experiments	no	S88
CAMKII γ (CAMK2G)	Cytosol	Misaligned chromosomes; multipolar spindles	371 cells from 2 independent experiments	no	S89
CENP-E_oligo1	Kinetochores	Misaligned chromosomes; prometaphase delay; exit with misaligned	259 cells from 3 independent experiments	yes	S90-S93

		chromosomes; die in or after mitosis			
CENP-E_oligo2			187 cells from 2 independent experiments	yes	
CHC17 clathrin	Mitotic spindle; centrosome	Chromosome misalignment; mitotic delay; disorganized spindles; multipolar spindles; spindle pole fragmentation	299 cells from 2 independent experiments	no	S70,S94,S95
CEP72_oligo1	centrosome	Misaligned chromosomes; multipolar spindles; spindle pole fragmentation	379 cells from 2 independent experiments	yes	S96
CEP72_oligo2	centrosome		170 cells from 2 independent experiments	yes	
CEP90_oligo1	Centrosome; pericentriolar satellites	Misaligned chromosomes; aberrant mitotic spindles; multipolar spindles	471 cells from 3 independent experiments	yes	S97
CEP90_oligo2	Centrosome; pericentriolar satellites		155 cells from 2 independent experiments	yes	
CLASP2b	Centrosome; kinetochore; microtubule plus ends; central spindle	Misaligned chromosomes; prometaphase delay; chromosome mis-segregation (lagging chromosomes and chromosome bridges); multipolar spindles; spindle pole fragmentation	408 cells from 2 independent experiments	yes	S80,S98,S99
CLASP1b	Centrosome; kinetochore; microtubule plus ends; central spindle	Misaligned chromosomes; chromosome mis-segregation (lagging chromosomes and chromosome bridges); multipolar spindles; spindle pole fragmentation	402 cells from 2 independent experiments	yes	S80,S98,S100
CLASP1+2			300 cells from 2 independent experiments	yes	
Aurora B_oligo1	Centromere; spindle, spindle midzone	Misaligned chromosomes; chromosome mis-segregation; cytokinesis defects	287 cells from 2 independent experiments	yes	S101-S103
Aurora B_oligo2			212 cells from 2 independent experiments	yes	
Astrin_oligo1	Spindle pole; kinetochores	Misaligned chromosomes; prometaphase delay; multipolar spindles;	400 cells from 2 independent experiments	yes	S76,S77,S104

		spindle pole fragmentation			
Astrin_oligo2			224 cells from 2 independent experiments	yes	
Aurora A_oligo1	Centrosome; central spindle	Misaligned chromosomes; mitotic delay; multipolar spindles; spindle pole fragmentation; chromosome mis-segregation (lagging chromosomes and chromosome bridges)	364 cells from 2 independent experiments	yes	S103,S105-S108
Aurora A_oligo2			79 cells from 1 experiment	yes	
INCENP	Centromere; spindle midzone	Prometaphase delay; Multipolar spindles; cytokinesis defects	199 cells from 2 independent experiments	yes	S109,S110
Haspin_oligo1	Chromosome; centrosome	Misaligned chromosomes; mitotic arrest; prometaphase delay; multipolar spindles; spindle pole fragmentation	399 cells from 2 independent experiments	no	S111,S112
Haspin_oligo2	Chromosome; centrosome		401 cells from 2 independent experiments	no	
ARP1	Kinetochores; mitotic spindle	Mitotic delay	221 cells from 2 independent experiments	no	S87
Spc25_oligo1	Kinetochores	Misaligned chromosomes; mitotic delay; aberrant mitotic spindles; multipolar spindles; cell death	298 cells from 3 independent experiments	yes	S113-S115
Spc25_oligo2			203 cells from 2 independent experiments	yes	
DYNLT3_oligo1	kinetochores	Increased mitotic index, particularly the number of cells in prophase/prometaphase	309 cells from 2 independent experiments	no	S116
DYNLT3_oligo2			564 cells from 3 independent experiments	no	
DYNLRB1/Road block-1	Kinetochores; mitotic spindle	Misaligned chromosomes; prometaphase delay	165 cells from 2 independent experiments	no	S87
Spc24_oligo1	Kinetochores	Misaligned chromosomes	399 cells from 2 independent experiments	yes	S113,S114
Spc24_oligo2			336 cells from 2 independent experiments	yes	
NdeL1	Kinetochores; mitotic spindle	Misaligned chromosomes;	462 cells from 2	no	S87,S117

		prometaphase delay; chromosome mis- segregation	independent experiments		
LIS1/PFAH1B1	Kinetochores; mitotic spindle	Misaligned chromosomes; prometaphase delay; chromosome mis- segregation (lagging chromosomes and chromosome bridges)	469 cells from 3 independent experiments	no	S87,S118
HSET/KIF1C	Microtubules		400 cells from 2 independent experiments	no	S119
Nde1	Kinetochores; mitotic spindle	Misaligned chromosomes; prometaphase delay;	611 cells from 3 independent experiments	yes	S87,S117
DLIC2	Spindle pole	Misaligned chromosomes; prometaphase delay	400 cells from 2 independent experiments	no	S87,S120
HAUS6_oligo1	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation; mitotic delay	345 cells from 2 independent experiments	yes	S61
HAUS6_oligo2	Centrosome, spindle		168 cells from 1 experiment	yes	
HAUS1_oligo1	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation; mitotic delay	400 cells from 2 independent experiments	no	S61,S121
HAUS1_oligo2	Centrosome, spindle		396 cells from 2 independent experiments	no	
DIC2/DYNC112	Kinetochores; mitotic spindle	Misaligned chromosomes; prometaphase delay	184 cells from 2 independent experiments	no	S87
survivin	Centromeres; spindle midzone	Misaligned chromosomes; prometaphase delay; chromosome segregation errors; Cytokinesis failure, mitotic catastrophe	294 cells from 2 independent experiments	yes	S122-S124
CPAP/ CENP-J	centriole	Misaligned chromosomes; mitotic delay; multipolar spindles; apoptosis	215 cells from 2 independent experiments	no	S125
Ndc80_oligo1	kinetochores	Misaligned chromosomes; mitotic arrest	191 cells from 2 independent experiments	yes	S3,S85,S126-S128
Ndc80_oligo2			238 cells from 2 independent experiments	yes	
Borealin	Centromere; spindle midzone		368 cells from 2 independent experiments	no	S129

Scc1/Rad21	Chromosome; centrosome	Misaligned chromosomes; prometaphase delay; multipolar spindles; spindle pole fragmentation	384 cells from 2 independent experiments	no	S112,S130,S131
Myosin 10	Spindle pole	Misaligned chromosomes; mitotic delay; aberrant mitotic spindles; spindle pole fragmentation; cytokinesis failure	500 cells from 3 independent experiments	no	S132
Sgo1/Shugoshin	Centromere; Kinetochore; centrosome; spindle pole	Misaligned chromosomes; prometaphase delay; spindle pole fragmentation	414 cells from 2 independent experiments	no	S133,S134
HAUS3_oligo1	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation;	400 cells from 2 independent experiments	no	S61
HAUS3_oligo2	Centrosome, spindle		400 cells from 2 independent experiments	no	
DHC/DYNC1H1	Kinetochore; mitotic spindle	Misaligned chromosomes; prometaphase delay; aberrant mitotic spindles	396 cells from 2 independent experiments	yes	S87,S93
CENP-T	kinetochore	Misaligned chromosomes, prometaphase arrest; multipolar spindles; cell death	395 cells from 2 independent experiments	no	S135-S137
CENP-T			229 cells from 2 independent experiments	no	
MLL	Mitotic spindle	Misaligned chromosomes; mitotic delay	560 cells from 3 independent experiments	no	S138
CENP-W	kinetochore	Misaligned chromosomes; mitotic delay; multipolar spindles	380 cells from 2 independent experiments	no	S136,S139
Shp2_oligo1	Kinetochore; centrosome; spindle midzone; midbody	Misaligned chromosomes; mitotic delay; chromosome mis-segregation (lagging chromosomes)	528 cells from 3 independent experiments	yes	S140
Shp2_oligo2			455 cells from 3 independent experiments	yes	
ASURA/PHB2	cytoplasm	Misaligned chromosomes; mitotic arrest	400 cells from 2 independent experiments	no	S128,S141,S142
CENP-H_oligo1	kinetochore	Misaligned chromosomes; aberrant mitotic spindles; multipolar spindles	324 cells from 3 independent experiments	yes	S143,S144
CENP-H_oligo2			255 cells from 2	yes	

			independent experiments		
Kif14_oligo1	Spindle poles; mitotic spindle; midbody	Misaligned chromosomes; cytokinesis failure; binucleated cells	436 cells from 3 independent experiments	no	S145,S146
Kif14_oligo2	Spindle poles; mitotic spindle; midbody		277 cells from 2 independent experiments	no	
WDR5	Mitotic spindle	Misaligned chromosomes; mitotic delay	383 cells from 2 independent experiments	no	S138
TAO1/MARKK	microtubules	Misaligned chromosomes; prometaphase delay; Muli-lobed nuclei; chromosome mis-segregation (lagging chromosomes)	416 cells from 2 independent experiments	no	S147,S148
Nup88	Mitotic spindle	Misaligned chromosomes; multipolar spindles	300 cells from 2 independent experiments	no	S149
ASB7	ND	Misaligned chromosomes	300 cells from 2 independent experiments	no	S150
And-1_oligo1	cytoplasm	Misaligned chromosomes; prometaphase delay	415 cells from 2 independent experiments	yes	S151
And-1_oligo2	cytoplasm		168 cells from 1 experiment	yes	
Septin-7	Spindle poles; mitotic spindle; midbody	Misaligned chromosomes; mitotic arrest	222 cells from 2 independent experiments	no	S152
ANKRD53	Spindle poles	Misaligned chromosomes; mitotic delay; Multinucleated cells	360 cells from 2 independent experiments	no	S153
TRAMM	Perinuclear region	Misaligned chromosomes; mitotic delay	371 cells from 2 independent experiments	no	S154
Septin-2_oligo1	plasma membrane, cleavage furrow and midbody	Misaligned chromosomes; mitotic delay; binucleated cells	411 cells from 2 independent experiments	yes	S155
Septin-2_oligo2			325 cells from 2 independent experiments	yes	
Seh1	kinetochores	Misaligned chromosomes; mitotic delay; cytokinesis defects	200 cells from 2 independent experiments	no	S156,S157
CENP-Q_oligo1	kinetochore	Misaligned chromosomes; prometaphase delay	430 cells from 3 independent experiments	no	S158
CENP-Q_oligo2	kinetochore		352 cells from 3	no	

			independent experiments		
NF-1	Astral microtubules; mitotic spindle; centrosomes; midbody	Misaligned chromosomes	375 cells from 2 independent experiments	no	S159
Scramble RNAi			7229 cells from 45 independent experiments		
Nup107	kinetochore	Misaligned chromosomes; mitotic delay; cytokinesis defects	428 cells from 3 independent experiments	no	S156,S157
Usp16	Cytoplasmic in interphase; kinetochore	Misaligned chromosomes; prometaphase delay	663 cells from 3 independent experiments	no	S160
NDR1	ND	Misaligned chromosomes	264 cells from 2 independent experiments	no	S161
GAK_oligo1	Trans-Golgi network	Misaligned chromosomes; prometaphase arrest; multipolar spindles; spindle pole fragmentation	333 cells from 2 independent experiments	yes	S162
GAK_oligo2	Trans-Golgi network		376 cells from 3 independent experiments	yes	
HAUS7	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation;	303 cells from 2 independent experiments	no	S61
CENP-M	kinetochore	Misaligned chromosomes	599 cells from 3 independent experiments	no	S163,S164
CENP-U	kinetochore	Misaligned chromosomes; chromosome mis-segregation (lagging chromosomes)	278 cells from 3 independent experiments	no	S165
MST1	ND	Misaligned chromosomes; prometaphase delay; cell death	300 cells from 2 independent experiments	no	S161
PTEN	Centrosome; mitotic spindle; midbody	Misaligned chromosomes; mitotic delay; spindle pole fragmentation; mitotic catastrophe	280 cells from 2 independent experiments	no	S166
HAUS2	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation;	339 cells from 3 independent experiments	no	S61
CENP-N_oligo1	kinetochore	Misaligned chromosomes, multipolar spindles	300 cells from 2 independent experiments	yes	S135
CENP-N_oligo2			200 cells from 2	yes	

			independent experiments		
Hsp72	Mitotic spindle; midbody	Misaligned chromosomes; prometaphase delay	428 cells from 3 independent experiments	no	S167
HAUS5	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation;	397 cells from 2 independent experiments	no	S61
HAUS4_oligo1	Centrosome, spindle	Misaligned chromosomes; aberrant mitotic spindles; spindle pole fragmentation;	324 cells from 2 independent experiments	no	S61
HAUS4_oligo2			254 cells from 2 independent experiments	no	
DYNLT1	Kinetochores; mitotic spindle	ND	596 cells from 3 independent experiments	no	S87
Rab5	Early endosomes	Misaligned chromosomes; prometaphase delay	579 cells from 3 independent experiments	no	S168
CENP-I_oligo 1	Kinetochores	Misaligned chromosomes, multipolar spindles; chromosome mis-segregation; apoptosis	305 cells from 2 independent experiments	yes	S135,S169,S170
CENP-I_oligo 2			207 cells from 2 independent experiments	yes	
Dsn1_oligo1	Kinetochores	Misaligned chromosomes; prometaphase delay	582 cells from 3 independent experiments	yes	S171
Dsn1_oligo2			229 cells from 2 independent experiments	yes	
CENP-P	kinetochores	Misaligned chromosomes; mitotic delay	567 cells from 3 independent experiments	no	S158
Zwint	Kinetochores	Misaligned chromosomes; cell death; chromosome mis-segregation (lagging chromosomes and chromosome bridges)	410 cells from 2 independent experiments	no	S172,S173
Nsl1_oligo1	Kinetochores	Misaligned chromosomes	300 cells from 2 independent experiments	yes	S171
Nsl1_oligo2			200 cells from 2 independent experiments	yes	
Mis12_oligo1	Kinetochores	Misaligned chromosomes	200 cells from 2 independent experiments	yes	S171

Mis12_oligo2			171 cells from 2 independent experiments	yes	
KNL1_oligo1	Kinetochores	Misaligned chromosomes	291 cells from 2 independent experiments	yes	S174,S175
KNL1_oligo2			219 cells from 2 independent experiments	yes	
Nup153	ND	Multilobed nuclei; cytokinesis abnormalities	200 cells from 2 independent experiments	no	S176-S178