Supplemental Materials Molecular Biology of the Cell

Montaño-Gutierrez et al.

Supplemental information for

Nano Random Forests to mine protein complexes and their relationships in quantitative proteomics data

Luis F. Montaño-Gutierrez¹, Shinya Ohta^{1,2}, Georg Kustatscher¹,

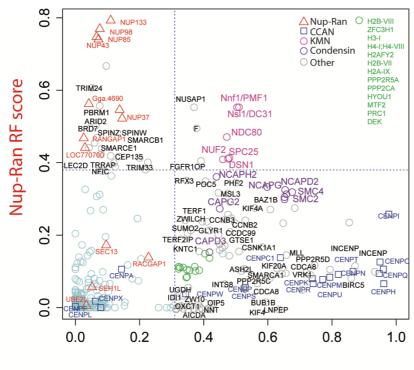
William C. Earnshaw^{1,*}, Juri Rappsilber^{1,3,*}

Figure S1. Expanded version of 2D interdependency plots in Fig 3C(A) and 3D(B) shows proteins with functional association to either complex. A. Expanded version of 3C. Green list corresponds to proteins (histones) in green circle cluster. B. Expanded version of 3D. Names were slightly moved to avoid overlap.

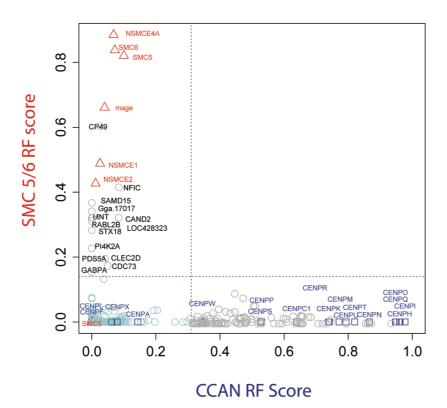
Figure S2. 2D interdependency plot between the Constitutive Centomere-Associated Network (CCAN, X axis, squares) and the ribosomal protein group (Y axis, triangles).

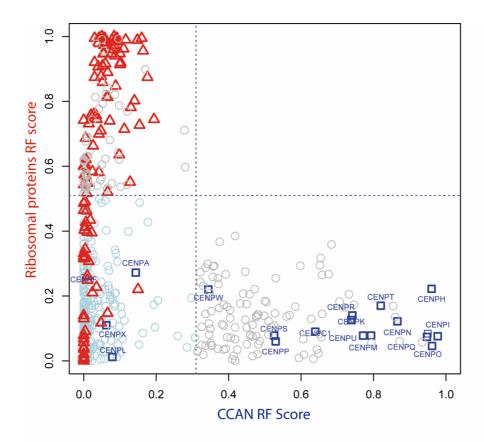
Table S1. nanoRF proteomics results table. Grey columns: the training factors used for each complex's nanoRF where 'T'= member of a complex, 'F'= hitchhiker, and '?'= unknown, proteins that are uncalled as any specific class. Orange Columns: the SILAC ratio columns used from the mitotic chromosome proteomics experiments, b) Colourless columns: each RF scores for each complex. Red-coloured entries are proteins that surpass each RF's cutoff score—i.e. they are significantly associated with the complex.

Table S2. Information about protein complexes and associations. Relevant information about the complex composition and statistics (MCC, AUC, RF cutoffs, hypergeometric tests).



CCAN RF Score





Ribosome class, significant (\triangle) .-

RPS15 RPS21 RPS154 RPS24 RPS10 RPL5 RPL10 RPL36 RPS29 RPS11	RPL13 RPL8 RPL7A RPL27A RPL9 RPL31 RPL17 RPL15 RPS14 RPL26L	RPLP1 MRPS22 RPS3A	RPL23 RPS17 RPS3 MRPL38 MRPS11 MRPL18 MRPL44 RPLP0 RPL11 RPL27 RPL6	MRPS17 MRPS18A MRPS30 MRPS25 MRPS26 RPS8 RPS20 MRPL46 MRPL15 RPS23 RPL24	RPS28 RPL22 RPL37 RPS12 RPL35A RPL23A MRPS27 MRPL48 RPSA MRPS16 RPS4X;RP	RPL39 RPS25 RPS13 RPS7	MRPS5 MRPL19 MRPL3
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Ribosome class, significant associated .-

C2H18orf8	LOC100858795	REV3L
GNB2L1	SERBP1	DCAF12
EAF2	GTPBP10	Gga.22411
LOC100858238	RCJMB04_14e22	HADHB
PTCD3	PWP1	PDCD2
EDEM3	LLPH	COX6C
NAP1L1	GLUD1	RG9MTD1
SRP14	GNL3	FILIP1
KIF13A	Gga.53205	YTHDC1
DNAJC21	NFIX	FECH
GOLIM4	SEC23IP	TMEM111
LOC100859914	RPF1	UBQLN1
GLUD1	MBD4	SMN
	MINA	