

Supplemental Material to:

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**Characterization of nuclear pore complex components in
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Supplemental Data

Characterization of nuclear pore complex components in fission yeast

Schizosaccharomyces pombe

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Table S1. Nucleoporin genes in *S. pombe*

<i>S. pombe</i> nucleoporin names	ORF names	experimental evidence for nucleoporin (references)		GFP fusion constructs	nuclear periphery localization	Orthologs			
						<i>H. sapiens</i>	<i>S. cerevisiae</i>	<i>A. nidulans</i>	<i>A. thaliana</i>
spCut11	SPAC1786.03	yes	(West et al.) ²⁶	Cut11-GFP-HA	yes	hsNdc1	scNdc1	An-Ndc1	-
spNup85	SPBC17G9.04c	yes	(Baï et al; Chen et al.) ^{19,29}	Nup85-GFP-HA	yes	hsNup75/85	scNup85	An-Nup85	atNup75
spNup107	SPBC428.01c	yes	(Baï et al; Chen et al.) ^{19,29}	Nup107-GFP-HA	yes	hsNup107	scNup84	An-Nup84	atNup107
spNup120	SPBC3B9.16c	yes	(Baï et al.) ¹⁹	Nup120-GFP-HA	yes	hsNup160	scNup120	An-Nup120	atNup160
spNup131	SPBP35G2.06c	yes	(Baï et al.) ¹⁹	GFP-Nup131	yes	hsNup133	scNup133	An-Nup133	atNup133
spNup132	SPAC1805.04	yes	(Baï et al; Chen et al.) ^{19,29}	GFP-Nup132	yes				
spNup189c	SPAC1486.05	yes	(Chen et al.) ²⁹	Nup189c-GFP-HA	yes	hsNup96	scNup145c	SonBc ^{Nup96}	atNup96/PRECOZ
spSeh1	SPAC15F9.02	yes	(Baï et al; Chen et al.) ^{19,29}	Seh1-GFP-HA	yes	hsSeh1 /Sec13L	scSeh1	An-Seh1	atSeh1
spNup97/Mug87	SPCC1620.11	yes	(Cho et al.) ³⁰	GFP-Nup97	yes	hsNup93	scNic96	An-Nic96	atNup93a
spNpp106	SPCC1739.14	yes	(Yoon et al.) ²⁵	Npp106-GFP	yes				atNup93b
spNup186	SPCC290.03c	yes	(Chen et al.) ²⁹	Nup186-GFP	yes	hsNup205	scNup192	An-Nup192	atNup205
spNup40	SPAC890.06	yes	(Chen et al.) ²⁹	GFP-Nup40	yes	hsNup35 /MP-44	scNup53, scNup59	-	atNup35
spNsp1	SPAC26A3.15c	yes	(Chen et al.) ²⁹	GFP-Nsp1	yes	hsNup62	scNsp1	An-Nsp1	atNup62
spNup44	SPBC19G7.15	yes	(Chen et al.) ²⁹	Nup44-GFP-HA	yes	hsNup54	scNup57	An-Nup57	atNup54
spNup45	SPAC22G7.09c	yes	(Chen et al.) ²⁹	Nup45-GFP-HA	yes	hsNup58	scNup49	An-Nup49	atNup58
spNup146	SPAC23D3.06c	yes	(Chen et al.) ²⁹	Nup146-GFP-HA	yes	hsNup214	scNup159	An-Nup159	atNup214
spNup61	SPCC18B5.07c	yes	(Chen et al.) ²⁹	Nup61-GFP-HA	yes	hsNup50	scNup2	An-Nup2	atNup50a, atNup50b
spNup124	SPAC30D11.04c	yes	(Balasundaram et al.) ²⁷	GFP-Nup124	yes	hsNup153	scNup1	-	atNup136 /Nup1
spNup211	SPCC162.08c	yes	(Chen et al.) ²⁹	Nup211-GFP	yes	hsTpr	scMlp1, scMlp2	An-Mlp1	atTpr/NUA
spNup189n	SPAC1486.05	yes	(Tange et al.) ³⁵	Nup189n-GFP	yes	hsNup98	scNup100, scNup116, scNup145n	SonBn ^{Nup98}	atNup98a, atNup98b
spRae1	SPBC16A3.05c	yes	(Brown et al.) ²⁴	GFP-Rae1	yes	hsRAE1	scGle2	SonA ^{Gle2}	atRAE1
spEly5	SPBC29A10.06c	yes	(Asakawa et al; Bilokapic and	Ely5-GFP-HA	yes	hsELYS	-	An-ELYS	atElys /HOS1

			Schwartz) ^{32,33}						
spNup37	SPAC4F10.18	yes	(Asakawa et al; Bilokapic and Schwartz) ^{32,33}	Nup37-GFP	yes	hsNup37	-	An-Nup37	-
spPom34/Mug31	SPAC1002.02	no		Pom34-GFP	yes	-	scPom34	An-Pom34	-
spPom152	SPBC29A10.07	no		Pom152-GFP-HA	yes	-	scPom152	An-Pom152	-
spNup184	SPAP27G11.10c	no		Nup184-GFP	yes	hsNup188	scNup188	An-Nup188	At4g38760
spNup155	SPAC19E9.01c	no		Nup155-GFP	yes	hsNup155	scNup157, scNup170	An-Nup170	atNup155
spNup82	SPBC13A2.02	no		Nup82-GFP-HA	yes	hsNup88	scNup82	An-Nup82	atNup88
spNup60	SPCC285.13c	no		Nup60-GFP	yes	-	scNup60	-	-
spAmo1	SPBC15D4.10c	no		Amo1-GFP	yes	hsNlp1 /hCG1/NUPL2	scNup42/Rip1	An-Nup42	-
spTts1	SPBC1539.04	no		Tts1-GFP-HA	yes	hsTMEM33	scPom33, scPer33	AN6689.2	At3g02420

Supplemental figure legends

Figure S1. The domain organization of *S. pombe* nucleoporins. The predicted domain features are shown in this schematic. The scale at the top indicates the number of amino acids. The orange vertical lines in spNup1, spNup44, spNup45, spNup146, spNup189n, spNup61 and spNup124 indicate the position of FG repeats. TM, transmembrane domain; WD, WD40 repeats. Positions and descriptions for domains are according to the *S. pombe* genome database (<http://www.pombase.org/>).

Figure S2. Western blot analysis of GFP-tagged Nup107-Nup160 subcomplex nucleoporins. Whole cell extracts equivalent to 1×10^6 cells were subjected to SDS-PAGE and transferred to PVDF membranes. GFP-fused nucleoporins, indicated at the top, were detected using anti-GFP antibody. Asterisks indicate non-specific bands. The arrow indicates the position of GFP. WT cells not expressing GFP and cells expressing GFP were used as negative and positive controls for detection of GFP, respectively: In the positive control cells, GFP was expressed under the *nda3* gene promoter in the wild type background. Data sets for **(A)** and **(B)** were taken separately so as to get a similar staining intensity of the GFP band compared with the GFP-nucleoporin bands; this was necessitated by the fact that the amount of GFP expressed in the positive control cells was much higher than the amount of GFP-nucleoporin expressed in the GFP-nucleoporin strains.



