

**Supplementary table TS1.** *S. cerevisiae* strains (S288C) and plasmids used in this study

Strain #	Genotype
LGY308	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, NUF2::URA-NUF2-GFP
LGY309	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, cin8-F467A, NUF2::URA-NUF2-GFP
LGY318	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , kip1::HIS3, cin8-3, NUF2::URA-NUF2-GFP
LGY330	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , NUF2::URA-NUF2-GFP
LGY340	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , cin8-F467A, NUF2::URA-NUF2-GFP
LGY1003	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, cin8-F467A, slk19::KanMX, NUF2::URA-NUF2-GFP
LGY1008	a, ade2, his3, leu2, ura3, cin8-3, NUF2::URA-NUF2-GFP
LGY1031	a, ade2, his3, leu2, ura3, cin8-3, slk19::KanMX, NUF2::URA-NUF2-GFP
LGY1039	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , cin8-F467A, spo12::KanMX, NUF2::URA-NUF2-GFP
LGY1043	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , cin8-F467A, slk19::KanMX, NUF2::URA-NUF2-GFP
LGY1064	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , kip1::HIS3, cin8-3, slk19::KanMX, NUF2::URA-NUF2-GFP
LGY1069	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , kip1::HIS3, cin8-3, spo12::KanMX, NUF2::URA-NUF2-GFP
LGY1087	a, ade2, his3, leu2, ura3, cin8-3, spo12::KanMX, NUF2::URA-NUF2-GFP
LGY1163	a, ade2, his3, leu2, ura3, GAL <sup>+</sup> , slk19::KanMX, NUF2::URA-NUF2-GFP
LGY1169	a, ade2, his3, leu2, ura3, GAL <sup>+</sup> , spo12::KanMX, NUF2::URA-NUF2-GFP
LGY1188	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, cin8-F467A, spo12::KanMX, NUF2::URA-NUF2-GFP
LGY1729	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ADE, nuf2::NUF2-GFP-URA3, SCC1-3HA::SpHIS5
LGY1739	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ade2, Can1, nuf2::NUF2-GFP-URA3, kip1::HIS3, his3::LEU2, SCC1-3HA::SpHIS5
LGY1740	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ade2, nuf2::NUF2-GFP-URA3, cin8-F467A, slk19::KanMX, kip1::HIS3, his3::LEU2, SCC1-3HA::SpHIS5
LGY1751	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ADE, nuf2::NUF2-GFP-URA3, cin8-F467A::LEU2, SCC1-3HA::SpHIS5
LGY1754	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ade2, nuf2::NUF2-GFP-URA3, cin8-F467A::LEU2, kip1::KanMX, SCC1-3HA::SpHIS5
LGY1539	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ADE, nuf2::NUF2-GFP-URA3, ASE1-GFP::SpHIS5
LGY1494	a, lys2, ura3, leu2, his3, cyh2 <sup>f</sup> , ADE, nuf2::NUF2-GFP-URA3, kip1::KanMX, ASE1-GFP::SpHIS5
LGY1510	a, lys2, ura3, leu2, his3, ADE, nuf2::NUF2-GFP-URA3, cin8-F467A, kip1::KanMX, ASE1-GFP::SpHIS5
LGY1806	a, lys2, ura3, leu2, his3, ADE, nuf2::NUF2-GFP-URA3, kip1::KanMX, ASE1-GFP::SpHIS5, ASE1-CEN-LEU2 (pB243)
LGY1808	a, lys2, ura3, leu2, his3, ADE, nuf2::NUF2-GFP-URA3, kip1::KanMX, ASE1-CEN-LEU2 (pB243)
LGY1478	a, lys2, his3, ura3, leu2, ADE, cyh2 <sup>f</sup> , cin8-F467A, kip1::KanMX, nuf2::NUF2-GFP-URA3, CDC14-GFP::SpHIS5
LGY1475	a, lys2, his3, ura3, leu2, ADE, kip1::KanMX, nuf2::NUF2-GFP-URA3, CDC14-GFP::SpHIS5
LGY1487	a, lys2, his3, ura3, leu2, ADE, kip1::KanMX, nuf2::NUF2-GFP-URA3, Slk19-GFP::SpHIS5
LGY1502	a, lys2, his3, ura3, leu2, ADE, cyh2 <sup>f</sup> , cin8-F467A, kip1::KanMX, nuf2::NUF2-GFP-URA3, Slk19-GFP::SpHIS5

LGY1968	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, cin8-F467A, nuf2::URA-NUF2-GFP (pES36)
LGY1971	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, cin8-F467A, nuf2::URA-NUF2-GFP (p415-MET25)
LGY14800	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , NUF2::URA-NUF2-GFP, leu2::LEU2-TUB1-GFP
LGY1125	a, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , cin8-F467A, NUF2::URA-NUF2-GFP, his3::HIS-TUB1-GFP
LGY1147	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, cin8-F467A, ura3::URA3-TUB1-GFP
LGY1260	a, ade2, his3, leu2, lys2, ura3, cyh2 <sup>f</sup> , can1, kip1::HIS3, NUF2::URA-NUF2-GFP, leu2::LEU2-TUB1-GFP
plasmids	
pVF10	16-370 bp of HIS3 ORF , in pRS305 (this study)
pVF9	C-terminal part of cin8-F456A tagged with 3XHA, in pRS305, (this study)
pKT239	pFA6a-link-yECitrine-3HA-SpHIS5 (Euroscarf)
pB243	Ase1 LEU2 CEN (Pellman lab (Schuyler et al., 2003))
p415-P <sub>MET</sub> 25	P <sub>MET</sub> LEU2 CEN
pES36	P <sub>MET</sub> → CDC20 LEU2 CEN (Mumberg et al., 1994; Schott and Hoyt, 1998)