Supplemental Information

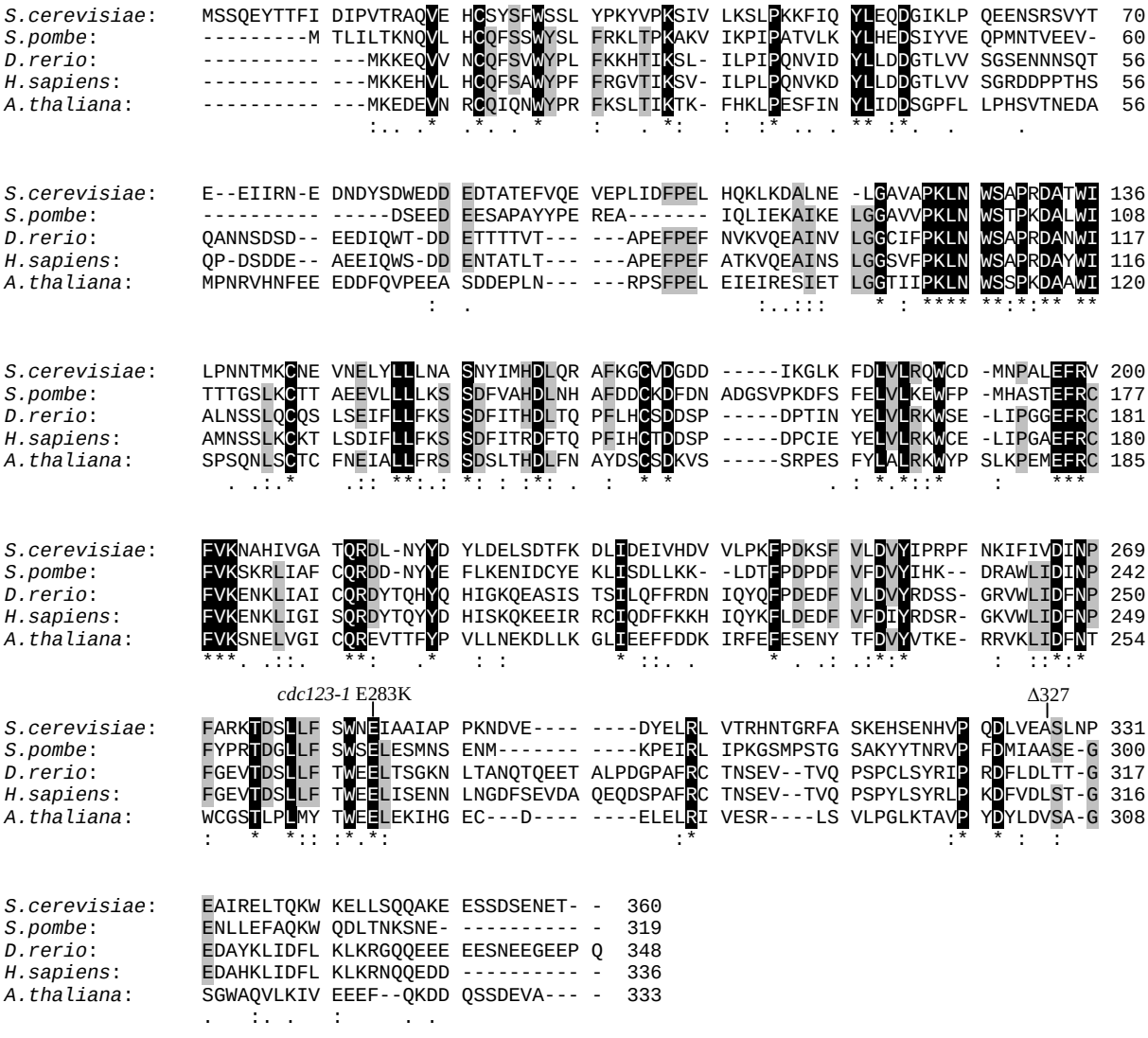

Figure S1. Alignment of Cdc123 orthologs.

Cdc123 orthologs from *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Danio rerio*, *Homo sapiens* and *Arabidopsis thaliana* were aligned with ClustalΩ (clustal consensus is shown below the aligned sequences). Residues that are conserved in 5 or 4 species are highlighted in black and grey, respectively. The amino acid substitution (E283K) resulting from the *cdc123-1* mutant allele (*G847A*) as well as the last residue of the truncated version encoded by the *cdc123Δ327* mutant allele are indicated.

Table S1. Yeast strains

name	relevant genotype	back-ground	used in Figure
BY4741	*MAT*a *his3Δ1 leu2Δ0 ura3Δ0 met15Δ0*	S288c	1A, 1B, 2D, 3A
W4050	*MAT*a *cdc123-1-ha3-URA3*	S288c	1A
W3702	*MAT*a *cdc123Δ327-ha3-natMX4*	S288c	1A, 2D
W3439	*MAT*α *cdc123-1-ha3-URA3 can1Δ::MFA1pr-HIS3-MFAalpha1pr-LEU2*	S288c	1B
W3129	*MAT*α *cdc123Δ327-ha3-natMX4 can1Δ::MFA1pr-HIS3-MFAalpha1pr-LEU2*	S288c	1B, 2B
YTH3 (1)	*MAT*a *CDC33(-198,1)::kanMX4-tTA-tetO7*	S288c	1B
BY4742	*MAT*α *his3Δ1 leu2Δ0 ura3Δ0 lys2Δ0 MET15*	S288c	1C
W13221	*MAT*α *cdc123Δ327-ha3-natMX4 MET15*	S288c	1C
W13224	*MAT*α *cdc123-1-ha3-URA3 MET15*	S288c	1C
W10897	*MAT*α p180	S288c	1D, 1E
W10898	*MAT*a *cdc123Δ327-ha3-natMX4* p180	S288c	1D, 1E
W10899	*MAT*a *gcn2Δ::kanMX6* p180	S288c	1D, 1E
W10900	*MAT*a *gcn2Δ::kanMX6 cdc123Δ327-ha3-natMX4* p180	S288c	1D, 1E
W10901	*MAT*α *gcn3Δ::kanMX4* p180	S288c	1D, 1E
W10902	*MAT*α *gcn3Δ::kanMX4 cdc123Δ327-ha3-natMX4* p180	S288c	1D, 1E
W10903	*MAT*a pWS3396	S288c	1D, 1E
W10904	*MAT*a *cdc123-1-ha3-URA3* pWS3396	S288c	1D, 1E
W10905	*MAT*a *gcn2Δ::kanMX6* pWS3396	S288c	1D, 1E
W10906	*MAT*α *gcn2Δ::kanMX6 cdc123-1-ha3-URA3* pWS3396	S288c	1D, 1E
BY4743	*MAT*a/α *his3Δ1/his3Δ1 leu2Δ0/leu2Δ0 ura3Δ0/ura3Δ0 MET15/met15Δ0 LYS2/lys2Δ0*	S288c	2A
W4467	*MAT*a/α *GCD11/GCD11-myc13-kanMX6*	S288c	2A
W5471	*MAT*a/α *cdc123Δ327-ha3-natMX4/cdc123Δ327-ha3-natMX4 GCD11/GCD11-myc13-kanMX6*	S288c	2A
W5472	*MAT*a/α *CDC123-ha3-HIS3MX6/CDC123-ha3-HIS3MX6 GCD11/GCD11-myc13-kanMX6*	S288c	2A
W4177	*MAT*a *GCD11-myc13-kanMX6*	S288c	2B, 3A
K699	*MAT*a *ade2-1 can1-100 his3-11 leu2-3,-112 trp1-1 ura3-2 ssd1*	W303	2C, 2E, 5C, 5D

Table S1 (continued). Yeast strains

name	relevant genotype		back-ground	used in Figure
W12768	*MAT*a	*kanMX4-pGCD11-flag3-GCD11*	W303	2C
W12770	*MAT*a	*kanMX4-pGCD11-flag3-GCD11 cdc123Δ327-ha3-HIS3MX6*	W303	2C
W4444	*MAT*α	*cdc123Δ::kanMX4 ura3::pGALL-cdc123-1-ha3-URA3*	W303	2E
W5294	*MAT*a	*CDC123-myc13-kanMX6*	S288c	3A
W4887	*MAT*a	*GCD1-myc13-HIS3MX6*	S288c	3A
W4884	*MAT*α	*GCD11-ha3-HIS3MX6*	S288c	3B
W5288	*MAT*α	*CDC123-ha3-HIS3MX6*	S288c	3B
W5290	*MAT*α	*SUI2-ha3-HIS3MX6*	S288c	3B
W276	*MAT*α	*his3 trp1 ura3::lexAop-lacZ leu2::lexAop-LEU2*	W303	4A
W12626	*MAT*a/α	*GCD11/gcd11Δ::kanMX6*	W303	4C, 5A
W12784	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 his3/his3::pGCD11-flag3-GCD11-tCYC1-HIS3*	W303	4C, 4D, 5A
W12786	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 his3/his3::pGCD11-flag3-GCD11(aa1-523)-tCYC1-HIS3*	W303	4C, 4D
W12788	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 his3/his3::pGCD11-flag3-GCD11(aa1-519)-tCYC1-HIS3*	W303	4C, 4D, 5A
W12790	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 his3/his3::pGCD11-flag3-GCD11(aa1-514)-tCYC1-HIS3*	W303	4C, 4D
W12833	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 his3/his3::pGCD11-flag3-GCD11(aa1-519)-tCYC1-HIS3 leu2/leu2::pTEF2-CDC123-tCYC1-LEU2*	W303	5A, 5B
W12949	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 leu2/leu2::pTEF2-CDC123-tCYC1-LEU2*	W303	5A
W12950	*MAT*a/α	*GCD11/gcd11Δ::kanMX6 his3/his3::pGCD11-flag3-GCD11-tCYC1-HIS3 leu2/leu2::pTEF2-CDC123-tCYC1-LEU2*	W303	5A
W5539	*MAT*a	*cdc123Δ::kanMX4 ura3::pTEF2-SUI2-tCYC1-URA3*	W303	5C, 5D
W5495	*MAT*a	*cdc123Δ::kanMX4 leu2::pTEF2-GCD11-tCYC1-LEU2*	W303	5C, 5D
W5540	*MAT*α	*cdc123Δ::kanMX4 ura3::pTEF2-SUI2-tCYC1-URA3 leu2::pTEF2-GCD11-tCYC1-LEU2*	W303	5C, 5D
W5544	*MAT*a	*cdc123Δ::kanMX4 trp1::pTEF2-SUI3-tCYC1-TRP1 leu2::pTEF2-GCD11-tCYC1-LEU2*	W303	5C, 5D
W5592	*MAT*α	*cdc123Δ::kanMX4 ura3::pTEF2-SUI2-tCYC1-URA3 trp1::pTEF2-SUI3-tCYC1-TRP1 leu2::pTEF2-GCD11-tCYC1-LEU2*	W303	5C, 5D

Table S2. Plasmids

name	description	vector	insert	used in Figure
p180 (2)	*pGCN4-lacZ, URA3, ARS/CEN*			1D, 1E
pWS3396	*pGCN4-lacZ, LEU2, ARS/CEN*	pRS315 (SalI/PstI)	SalI/PstI fragment of p180	1D, 1E
pWS1389	*prha-his6-CDC123*	pJOE4056.2 (BamHI/HindIII)	*CDC123* (BamHI/HindIII)	3C
pWS1483	*prha-mbp-GCD11*	pJOE2955 (BamHI/HindIII)	*GCD11* (BamHI/HindIII)	3C
pWS1957	*prha-mbp-GCD11-RBS-his6-CDC123*	pWS1483 (HindIII)	*RBS-his6-CDC123* (HindIII)	3C
pEG202 (3)	*pADH-lexA-MCS, HIS3, 2µ*			4A
pJG4-5 (3)	*pGAL-NLS-AD-HA-MCS, TRP1, 2µ*			4A
pWS1463	*pADH-lexA-CDC123*	pEG202 (EcoRI/XhoI)	*CDC123* (EcoRI/XhoI)	4A
pWS1513	*pGAL-NLS-AD-HA-GCD11*	pJG4-5 (EcoRI/XhoI)	*GCD11 (bp1-1584)* (EcoRI/SalI)	4A
pWS1535	*pADH-lexA-SUI3*	pEG202 (EcoRI/XhoI)	*SUI3* (MunI/XhoI)	4A
pWS1537	*pADH-lexA-SUI2*	pEG202 (EcoRI/XhoI)	*SUI2* (EcoRI/XhoI)	4A
pWS3413	*pGAL-NLS-AD-HA-GCD11(aa410-527)*	pJG4-5 (EcoRI/XhoI)	*GCD11 (bp1228-1584)* (EcoRI/SalI)	4A
pWS3473	*pGAL-NLS-AD-HA-GCD11(aa1-514)*	pJG4-5 (EcoRI/XhoI)	*GCD11(bp1-1542+Stop)* (EcoRI/SalI)	4A
pWS3917	*pADH-lexA-hD123*	pEG202 (EcoRI/XhoI)	*hD123* (EcoRI/XhoI)	4A

Table S3. Antibodies

antibody	description	used for immunoprecipitation in Figure	used for Western blot in Figure
anti-Cdc123	affinity-purified polyclonal rabbit antiserum (this study)	-	3A, 4C, 5A
anti-flag	M2, mouse monoclonal (Sigma-Aldrich)	2C, 4C, 5A (agarose conjugate)	2C, 4C, 5A
anti-Gcd11	polyclonal rabbit antiserum (4)	-	2D, 2E, 5D
anti-Gcd11	affinity-purified polyclonal rabbit antiserum (this study)	-	3A, 3C
anti-ha	12CA5, mouse monoclonal	-	3B, 4A
anti-his	Tetra-His antibody, mouse monoclonal (Qiagen)	-	3C
anti-myc	9E10, mouse monoclonal	2A, 3A	2A, 3A
anti-Sui2	polyclonal rabbit antiserum (5)	2D, 2E	1E, 2A, 2D, 2E, 3A, 5D
anti-Sui2	polyclonal rabbit antiserum (this study)	-	2C, 4C, 5A
anti-Sui2-**P**	anti-eIF2α[phoshoS52] polyclonal rabbit antibody (Invitrogen, 44728G)	-	1E
anti-Sui3	polyclonal rabbit antiserum (6)	2D, 2E	2A, 2D, 2E, 3A, 5D
anti-Sui3	polyclonal rabbit antiserum (this study)	-	2C, 4C, 5A

Supplemental References

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