Table S1. Yeast Strains Used in This Study, Related to the ExperimentalProcedures

SWR1-3Flag	W1588C-4C swr1::SWR1-3Flag-P-KanMX-P	Kind gift	of W	/ei-
htz1∆	htz1∆::natMX4	hua Wu		
SWR1-2Flag	W1588-4C swr1::natMX [pRS416-swr1∆N2-2Flag]	Wei-hua	et	al
(ΔN2)		2006		
SWR1-Flag	W1588-4C SWR1-3Flag kanMX4 arp6::hphMX6 htz1::natMX	Wei-hua	et	al
arp6∆		2006		

This table lists the S.cerevisiae strains used in this study. The three strains were the

sources of the SWR1 (top), SWR1- Δ N-Module (middle) and SWR1- Δ C-Module (bottom) complexes.

Table S2. Inter- and Intraprotein Crosslinks Identified, Related to Figure 5

<u>INTER</u> PROTEIN CROSSLINKS							
Crosslinked peptides (Protein1-		Xlink1		Xlink2		Cα-	
Protein2)	Protein1	(AA)	Protein2	(AA)		Cα (Å)	ld score
HQGIMVGMGQ <mark>K</mark> DSYVGDEAQSKR-							
T <u>K</u> SNESR	P60010 ACT1	K50	P38326 SWC5	K205			37.31
LLAQAEDEDDV <u>K</u> AANLAMR-							
T <u>K</u> SNESR	Q05471 SWR1	K1456	P38326 SWC5	K205			33.74
<u>K</u> IIQERIR-S <u>K</u> GRSGSK	Q03388 VPS72	K218	P35817 BDF1	K504			33.21
GLGLDESGVA <u>K</u> RVEGGFVGQIEAR-							
FAVQAV <u>K</u> KR	Q03940 RVB1	K42	Q05471 SWR1	K418			32.2
FAPGF <u>K</u> VLTYYGSPQQR-E <u>K</u> GVK	Q05471 SWR1	K772	P31376 SWC3	K407			30.55
SAAEIAEEEALVVES <mark>K</mark> K-SST <u>K</u> ARIAR	P53201 SWC4	K262	Q05471 SWR1	K371			30.05
FINHLI <u>K</u> KALEPK-EIE <u>K</u> FKTK	P80428 ARP4	K195	P31376 SWC3	K498			29.43
H <mark>K</mark> EQESQHMLTQEER- <mark>K</mark> SIGIK	Q03388 VPS72	K228	Q12464 RVB2	K123			29.19
LLSSSGKVGSVLDGS <mark>K</mark> EAR-							
LENLV <mark>K</mark> QEAINGS	P38326 SWC5	K138	P53930 YAF9	K219			28.5
NDYVPL <mark>K</mark> R-K <u>K</u> YLQR	P80428 ARP4	K323	P53201 SWC4	K238			26.85
LLSSSGKVGSVLDGS <mark>K</mark> EAR-							
etdslqpits <u>k</u> eik	P38326 SWC5	K138	Q05471 SWR1	K326			26.64
ST <u>K</u> ILETSANYL-GVS <u>K</u> TR	Q03940 RVB1	K454	Q12464 RVB2	K331		14.5Å	26.33
HQGIMVGMGQKDSYVGDEAQS <u>K</u> R-							
T <u>K</u> SNESR	P60010 ACT1	K61	P38326 SWC5	K205			25.82
TAAHTHI <u>K</u> GLGLDESGVAKR-							
SD <u>K</u> KVIPIEEK	Q03940 RVB1	K31	P80428 ARP4	K335			25.1
INTRAPROTEIN CROSSLINKS							
Creatinked newtides (Dretain1		Vlink1		Viala		6~	
Crosslinked peptides (Protein1- Protoin2)	Protoin1	Xlink1	Protoin?	Xlink2	AA1 -	Cα- Cα (Å)	ld scoro
Crosslinked peptides (Protein1- Protein2)	Protein1	Xlink1 (AA)	Protein2	Xlink2 (AA)	AA1 - AA2	Cα- Cα (Å)	ld score
Crosslinked peptides (Protein1- Protein2)	Protein1	Xlink1 (AA) K59	Protein2	Xlink2 (AA) K331	AA1 - AA2 272	Cα- Cα (Å)	Id score
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR	Protein1 Q12464 RVB2 P38326 SWC5	Xlink1 (AA) K59 K79	Protein2 Q12464 RVB2 P38326 SWC5	Xlink2 (AA) K331 K64	 AA1 - AA2 272 15	Cα- Cα (Å) 33.6Å	Id score 44.18 38 33
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDVVPLKR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ABP4	Xlink1 (AA) K59 K79 K313	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ABP4	Xlink2 (AA) K331 K64 K323	AA1 - AA2 272 15 10	Cα- Cα (Å) 33.6Å	ld score 44.18 38.33 38.27
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSEAVAEQU KOROEMOTALKR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4	Xlink1 (AA) K59 K79 K313 K372	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53301 SWC4	Xlink2 (AA) K331 K64 K323 K370	AA1 - AA2 272 15 10 2	Cα- Cα (Å) 33.6Å 26.0Å	ld score 44.18 38.33 38.27 38.01
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAOOEDKUJER-	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4	Xlink1 (AA) K59 K79 K313 K372	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4	Xlink2 (AA) K331 K64 K323 K370	AA1 - AA2 272 15 10 2	Cα- Cα (Å) 33.6Å 26.0Å	ld score 44.18 38.33 38.27 38.01
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVI DGSKEAR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4	Xlink1 (AA) K59 K79 K313 K372 K151	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138	AA1 - AA2 272 15 10 2	Cα- Cα (Å) 33.6Å 26.0Å	ld score 44.18 38.33 38.27 38.01 37.34
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205	AA1 - AA2 272 15 10 2 13 54	Cα- Cα (Å) 33.6Å 26.0Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323	 AA1 - AA2 272 15 10 2 13 54 10	Cα- Cα (Å) 33.6Å 26.0Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SUUTKSYNEOEIK GVSKTR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 PVP2	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K257	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 PVB2	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331	 AA1 - AA2 272 15 10 2 13 54 10 26	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 26.65
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGI NDELVI HNKDGELAB-	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331	 AA1 - AA2 272 15 10 2 13 54 10 26	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285	AA1 - AA2 272 15 10 2 13 54 10 26 22	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.65
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 O12464 RVB2	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 D12464 RVB2	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331	AA1 - AA2 272 15 10 2 13 54 10 26 22 7	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.65 36.61 35.52
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR EGPSTNKKPER-SYKGEMR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338 K23	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.65 36.61 35.52 34.91
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 Q12464 RVB2 Q12509 ARP6 P53201 SWC4	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338 K23 K23	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 Q12464 RVB2 Q12509 ARP6 P53201 SWC4	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144 K370	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 24.13
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P25917 RD51	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338 K23 K372 K25	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P25817 RD51	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144 K370 K520	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 22.06
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK LKTVVTYDMKR-DKKNK	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P35817 BDF1 D29206 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K151 K313 K357 K263 K338 K23 K372 K525 K70	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P35817 BDF1 D28236 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144 K370 K520	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5 15	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 33.06 22.75
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK LKTVVTYDMKR-DKKNK IESESGGLIKTRR-NKVDYSR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338 K23 K372 K525 K79 K285	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144 K370 K520 K64	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5 15 80	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 33.06 32.75 22.68
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK LKTVVTYDMKR-DKKNK IESESGGLIKTRR-NKVDYSR VGSAEDERYKELR-TKSNESR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 P38326 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338 K23 K372 K525 K79 K285	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144 K370 K520 K64 K205	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5 15 80	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 33.06 32.75 32.68
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER- VGSVLDGSKEAR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK LKTVVTYDMKR-DKKNK IESESGGLIKTRR-NKVDYSR VGSAEDERYKELR-TKSNESR KDEEEQLKR-WNMAEKAYR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 P38326 SWC5 Q05471 SWR1	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K151 K313 K357 K263 K338 K23 K372 K525 K79 K285 K433	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 P38326 SWC5 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 P38326 SWC5 P38326 SWC5 Q05471 SWR1	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K285 K331 K144 K370 K520 K64 K205 K426	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5 15 80 7	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 33.06 32.75 32.68 32.54
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK LKTVVTYDMKR-DKKNK IESESGGLIKTRR-NKVDYSR VGSAEDERYKELR-TKSNESR KDEEEQLKR-WNMAEKAYR AGLNDELVLHNKDGFLAR-TKSNESR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 Q3847 BDF1 P38326 SWC5 Q05471 SWR1 P38326 SWC5	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K313 K357 K263 K338 K23 K372 K525 K79 K285 K433 K263	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 Q3847 BDF1 P38326 SWC5 Q05471 SWR1 P38326 SWC5	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K148 K370 K520 K64 K205 K426 K205	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5 15 80 7 58	Cα- Cα (Å) 33.6Å 26.0Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 33.06 32.75 32.68 32.54 32.54
Crosslinked peptides (Protein1- Protein2) RAAGVILKMVQNGTIAGR-GVSKTR IESESGGLIKTR-NKVDYSR SNSGVVKTWR-NDYVPLKR KSESAYAEQLLK-QRQEMQTALKR STTAAQQEDKILIER- VGSVLDGSKEAR STTAAQQEDKILIER-TKSNESR SNSGVVKTWR-NDYVPLKR SIIITTKSYNEQEIK-GVSKTR AGLNDELVLHNKDGFLAR- VGSAEDERYKELR GTNYKSPHGLPLDLLDR-GVSKTR FGPSTNKKPFR-SYKGEMR RKSESAYAEQLLK-QEMQTALKRK LKTVVTYDMKR-DKKNK IESESGGLIKTRR-NKVDYSR VGSAEDERYKELR-TKSNESR KDEEEQLKR-WNMAEKAYR AGLNDELVLHNKDGFLAR-TKSNESR FAVQAVKKR-WNMAEKAYR	Protein1 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 Q05471 SWR1 P38326 SWC5 Q05471 SWR1	Xlink1 (AA) K59 K79 K313 K372 K151 K151 K151 K313 K357 K263 K338 K23 K372 K525 K79 K285 K433 K263 K418	Protein2 Q12464 RVB2 P38326 SWC5 P80428 ARP4 P53201 SWC4 P38326 SWC5 P38326 SWC5 P80428 ARP4 Q12464 RVB2 Q12464 RVB2 Q12509 ARP6 P53201 SWC4 P38326 SWC5 Q05471 SWR1 P38326 SWC5 Q05471 SWR1	Xlink2 (AA) K331 K64 K323 K370 K138 K205 K323 K331 K148 K370 K520 K64 K205 K426 K205 K426 K205 K426	AA1 - AA2 272 15 10 2 13 54 10 26 22 7 121 2 5 15 80 7 58 8 8	Cα- Cα (Å) 33.6Å 26.0Å 23.9Å 4.1Å	ld score 44.18 38.33 38.27 38.01 37.34 37.08 36.76 36.65 36.61 35.52 34.91 34.13 33.06 32.75 32.68 32.54 32.54 32.54
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P53201 SWC4	K372	P53201 SWC4	K370	2		30.66
P80428 ARP4	K195	P80428 ARP4	K218	23	19.5Å	30.04
P35817 BDF1	K497	P35817 BDF1	K488	9		29.96
Q05471 SWR1	K418	Q05471 SWR1	K426	8		29.59
Q05471 SWR1	K433	Q05471 SWR1	K426	7		29.54
Q12464 RVB2	K183	Q12464 RVB2	K154	29	19.5Å	29.17
Q05471 SWR1	K74	Q05471 SWR1	K82	8		28.88
Q05471 SWR1	K407	Q05471 SWR1	K400	7		28.84
Q05471 SWR1	K407	Q05471 SWR1	K400	7		28.34
Q05471 SWR1	K426	Q05471 SWR1	K433	7		27.87
Q12464 RVB2	K338	Q12464 RVB2	K331	7	4.1Å	27.26
P80428 ARP4	K336	P80428 ARP4	K332	4	N/A	26.23
Q03940 RVB1	K454	Q03940 RVB1	K450	4	4.9Å	26.19
P31376 SWC3	K380	P31376 SWC3	K371	9		25.41
P80428 ARP4	K296	P80428 ARP4	K259	37	21.2Å	25.35
	P53201 SWC4 P80428 ARP4 P35817 BDF1 Q05471 SWR1 Q05471 SWR1 Q12464 RVB2 Q05471 SWR1 Q05471 SWR1 Q05471 SWR1 Q05471 SWR1 Q12464 RVB2 P80428 ARP4 Q03940 RVB1 P31376 SWC3 P80428 ARP4	P53201 SWC4K372 P80428 ARP4K195 P35817 BDF1K497 Q05471 SWR1K418 Q05471 SWR1K433 Q12464 RVB2K183 Q05471 SWR1K74 Q05471 SWR1K407 Q05471 SWR1K426 Q12464 RVB2K338 P80428 ARP4K336 P31376 SWC3K380 P80428 ARP4K296	P53201 SWC4K372 P53201 SWC4 P80428 ARP4K195 P80428 ARP4 P35817 BDF1K497 P35817 BDF1 Q05471 SWR1K418 Q05471 SWR1 Q05471 SWR1K433 Q05471 SWR1 Q12464 RVB2K183 Q12464 RVB2 Q05471 SWR1K74 Q05471 SWR1 Q05471 SWR1K407 Q05471 SWR1 Q05471 SWR1K407 Q05471 SWR1 Q05471 SWR1K407 Q05471 SWR1 Q05471 SWR1K407 Q05471 SWR1 Q05471 SWR1K426 Q05471 SWR1 Q05471 SWR1K426 Q05471 SWR1 Q05471 SWR1K426 Q05471 SWR1 Q03940 RVB1K436 P80428 ARP4 Q03940 RVB1K454 Q03940 RVB1 P31376 SWC3K380 P31376 SWC3 P80428 ARP4K296 P80428 ARP4	P53201 SWC4K372 P53201 SWC4K370 P80428 ARP4K195 P80428 ARP4K218 P35817 BDF1K497 P35817 BDF1K488 Q05471 SWR1K418 Q05471 SWR1K426 Q05471 SWR1K433 Q05471 SWR1K426 Q12464 RVB2K183 Q12464 RVB2K154 Q05471 SWR1K74 Q05471 SWR1K82 Q05471 SWR1K407 Q05471 SWR1K400 Q05471 SWR1K426 Q05471 SWR1K433 Q12464 RVB2K338 Q12464 RVB2K331 P80428 ARP4K336 P80428 ARP4K322 Q3940 RVB1K454 Q03940 RVB1K450 P31376 SWC3K380 P31376 SWC3K371 P80428 ARP4K296 P80428 ARP4K259	P53201 SWC4K372 P53201 SWC4K3702 P80428 ARP4K195 P80428 ARP4K21823 P35817 BDF1K497 P35817 BDF1K4889 Q05471 SWR1K418 Q05471 SWR1K4268 Q05471 SWR1K433 Q05471 SWR1K4267 Q12464 RVB2K183 Q12464 RVB2K15429 Q05471 SWR1K74 Q05471 SWR1K828 Q05471 SWR1K407 Q05471 SWR1K4007 Q05471 SWR1K426 Q05471 SWR1K4007 Q05471 SWR1K426 Q05471 SWR1K4337 Q05471 SWR1K426 Q05471 SWR1K4007 Q05471 SWR1K426 Q05471 SWR1K4007 Q05471 SWR1K426 Q05471 SWR1K4337 Q12464 RVB2K338 Q12464 RVB2K3317 P80428 ARP4K336 P80428 ARP4K3224 P31376 SWC3K380 P31376 SWC3K3719 P80428 ARP4K296 P80428 ARP4K25937	P53201 SWC4 K372 P53201 SWC4 K370 2 P80428 ARP4 K195 P80428 ARP4 K218 23 19.5Å P35817 BDF1 K497 P35817 BDF1 K488 9 9 Q05471 SWR1 K418 Q05471 SWR1 K426 8 9 Q12464 RVB2 K183 Q12464 RVB2 K154 29 19.5Å Q05471 SWR1 K74 Q05471 SWR1 K426 7 19.5Å Q05471 SWR1 K74 Q05471 SWR1 K426 7 19.5Å Q05471 SWR1 K74 Q05471 SWR1 K426 7 19.5Å Q05471 SWR1 K74 Q05471 SWR1 K400 7 19.5Å Q05471 SWR1 K407 Q05471 SWR1 K400 7 1005471 SWR1 K407 1005471 SWR1 K400 7 Q05471 SWR1 K407 Q05471 SWR1 K407 Q05471 SWR1 K400 7 4.1Å Q05471 SWR1 K407 Q05471 SWR1 K407 Q05471 SWR1 K400 7 4.1Å Q05471 SWR1

This table lists all the crosslinked species identified with an Id score > 25. The crosslinked peptides are shown with single-letter code, separated by a dash (first column). The crosslinked lysines are indicated in red and underlined. Columns 2 and 4 identify the proteins that gave source to the first and second peptides in the crosslinked species, respectively. Columns 3 and 5 indicate the positions of the crosslinked lysine residues in the full-length proteins for the first and second peptides in the crosslinked species, respectively. Column 6, which refers only to intraprotein crosslinks, indicates the distance, in residues, between the two crosslinked lysines. Column 7 shows the distance, in Å, between the α carbons of the crosslinked lysines whenever a crystal structure is available. The distance reported for the crosslink between Rvb1 and Rvb2 was measured using the homology model we generated for the S.cerevisiae heterohexamer (see Supplementary Methods). Column 8 reports the ld scores.