

Supplemental Table 2

Functional Interaction Levels: TORC1 & Actin-related Genes

Level 1: Genetic Interactions with TORC1/2 (8 Genes)

YER155C	BEM2
YHR030C	SLT2
YKL126W	YPK1
YAL016W	TPD3
YOR035C	SHE4
YNL138W	SRV2
YNL243W	SLA2

Level 2: 2X Genetic Interactions with Level 1 Genes (26 Genes)*

YCR088W	ABP1 (12)	YBR023C	CHS3 (19)	YOR326W	MYO2 (3)
YFL039C	ACT1 (14)	YLR330W	CHS5 (21)	YOL115W	PAP2 (10)
YOR067C	ALG8 (24)	YHR142W	CHS7 (20)	YPL031C	PHO85 (1)
YBR234C	ARC40 (17)	YHR007C	ERG11 (26)	YOR329C	SCD5 (11)
YDL029W	ARP2 (9)	YLR342W	FKS1 (5)	YBL061C	SKT5 (16)
YJL020C	BBC1 (13)	YMR307W	GAS1 (6)	YGR229C	SMI1 (7)
YNL271C	BNI1 (4)	YJR075W	HOC1 (23)	YER111C	SWI4 (8)
YDR054C	CDC34 (25)	YNL322C	KRE1 (15)	YNL079C	TPM1 (2)
YGL206C	CHC1 (22)	YDR245W	MNN10 (18)		

* Note: number in parentheses corresponds to position of indicated gene in Figure 7C

Level 3 Genes (Rapamycin filtered) (108 Genes)

YLR085C	ARP6	YCR034W	FEN1	YDL006W	PTC1
YLR242C	ARV1	YGL020C	GET1	YGL058W	RAD6
YLR423C	ATG17	YER083C	GET2	YOR275C	RIM20
YAL020C	ATS1	YNL153C	GIM3	YNL294C	RIM21
YJL095W	BCK1	YDR507C	GIN4	YGL045W	RIM8
YER155C	BEM2	YOR070C	GYP1	YBR229C	ROT2
YNL271C	BNI1	YOR358W	HAP5	YOR312C	RPL20B
YDL074C	BRE1	YGL168W	HUR1	YBL072C	RPS8A
YAR014C	BUD14	YLR384C	IKI3	YGR056W	RSC1
YMR038C	CCS1	YKL032C	IXR1	YLR357W	RSC2
YBR131W	CCZ1	YPR159W	KRE6	YGR161C	RTS3
YCR094W	CDC50	YNL323W	LEM3	YDR159W	SAC3
YLR418C	CDC73	YPL055C	LGE1	YDR389W	SAC7
YLR330W	CHS5	YDR378C	LSM6	YLR079W	SIC1
YEL061C	CIN8	YLR368W	MDM30	YBR077C	SLM4
YNL298W	CLA4	YDR245W	MNN10	YHR030C	SLT2
YPR120C	CLB5	YML128C	MSC1	YGR229C	SMI1
YNR041C	COQ2	YDR335W	MSN5	YDR477W	SNF1
YPL170W	DAP1	YDR162C	NBP2	YPL002C	SNF8
YAL013W	DEP1	YNL119W	NCS2	YEL031W	SPF1
YOR030W	DFG16	YGL211W	NCS6	YBR081C	SPT7
YMR238W	DFG5	YGR078C	PAC10	YCR081W	SRB8
YAL026C	DRS2	YCR044C	PER1	YDR293C	SSD1
YBR078W	ECM33	YOL003C	PFA4	YDR126W	SWF1
YGR200C	ELP2	YBL051C	PIN4	YDR334W	SWR1
YPL086C	ELP3	YGL167C	PMR1	YPR040W	TIP41
YMR312W	ELP6	YML017W	PSP2	YNL079C	TPM1

YHR111W	UBA4	YHR012W	VPS29	YNL064C	YDJ1
YER151C	UBP3	YJL154C	VPS35	YGL081W	YGL081W
YDR207C	UME6	YLR417W	VPS36	YHR045W	YHR045W
YLR386W	VAC14	YLR360W	VPS38	YLR200W	YKE2
YOR106W	VAM3	YKR020W	VPS51	YKR074W	YKR074W
YGL212W	VAM7	YAL002W	VPS8	YMR073C	YMR073C
YML115C	VAN1	YML097C	VPS9	YPL144W	YPL144W
YKL041W	VPS24	YLR337C	VRP1	YLR262C	YPT6
YPL065W	VPS28	YNL107W	YAF9	YJL139C	YUR1

Level 4 Genes (Rapamycin Filtered) (236 Genes)

YFL039C	ACT1	YBR078W	ECM33	YML128C	MSC1
YDR448W	ADA2	YGR200C	ELP2	YDR335W	MSN5
YPL195W	APL5	YPL086C	ELP3	YMR287C	MSU1
YGR261C	APL6	YMR312W	ELP6	YDR162C	NBP2
YIL040W	APQ12	YIL005W	EPS1	YNL119W	NCS2
YBR164C	ARL1	YGL054C	ERV14	YGL211W	NCS6
YPL051W	ARL3	YOR033C	EXO1	YDR176W	NGG1
YLR085C	ARP6	YNL127W	FAR11	YKL057C	NUP120
YLR242C	ARV1	YCR034W	FEN1	YML103C	NUP188
YLR423C	ATG17	YNL135C	FPR1	YHL029C	OCA5
YAL020C	ATS1	YJR040W	GEF1	YHR073W	OSH3
YJL095W	BCK1	YGL020C	GET1	YML019W	OST6
YLR399C	BDF1	YER083C	GET2	YGR078C	PAC10
YER155C	BEM2	YDL198C	GGC1	YBR221C	PDB1
YNL271C	BNI1	YNL153C	GIM3	YCR044C	PER1
YDL074C	BRE1	YDR507C	GIN4	YOL003C	PFA4
YPL084W	BRO1	YER040W	GLN3	YJL179W	PFD1
YBR290W	BSD2	YHL031C	GOS1	YGL025C	PGD1
YFL025C	BST1	YGR163W	GTR2	YNL097C	PHO23
YAR014C	BUD14	YOR070C	GYP1	YHR034C	PIH1
YJR122W	CAF17	YGL237C	HAP2	YBL051C	PIN4
YNL288W	CAF40	YBL021C	HAP3	YMR123W	PKR1
YGR036C	CAX4	YOR358W	HAP5	YGL167C	PMR1
YMR038C	CCS1	YBR133C	HSL7	YDR435C	PPM1
YBR131W	CCZ1	YGL168W	HUR1	YML017W	PSP2
YDR364C	CDC40	YLR384C	IKI3	YDL006W	PTC1
YCR094W	CDC50	YER019W	ISC1	YEL037C	RAD23
YLR418C	CDC73	YKL032C	IXR1	YGL058W	RAD6
YLR330W	CHS5	YDR017C	KCS1	YJR033C	RAV1
YEL061C	CIN8	YPR159W	KRE6	YDR195W	REF2
YNL298W	CLA4	YKL110C	KTI12	YFL033C	RIM15
YPR120C	CLB5	YJL134W	LCB3	YOR275C	RIM20
YNR041C	COQ2	YNL323W	LEM3	YNL294C	RIM21
YNR010W	CSE2	YPL055C	LGE1	YGL045W	RIM8
YKL139W	CTK1	YDR378C	LSM6	YGR180C	RNR4
YPR124W	CTR1	YEL053C	MAK10	YBR229C	ROT2
YGR092W	DBF2	YBR298C	MAL31	YGL070C	RPB9
YAL013W	DEP1	YLR368W	MDM30	YMR142C	RPL13B
YOR030W	DFG16	YGL219C	MDM34	YOR312C	RPL20B
YMR238W	DFG5	YLR288C	MEC3	YIL052C	RPL34B
YDL160C	DHH1	YJR077C	MIR1	YNL302C	RPS19B
YDR069C	DOA4	YNL076W	MKS1	YBL072C	RPS8A
YBR278W	DPB3	YDR245W	MNN10	YIL153W	RRD1
YAL026C	DRS2	YJR074W	MOG1	YPL152W	RRD2
YGL043W	DST1	YNL297C	MON2	YHR031C	RRM3
YKL204W	EAP1	YIR021W	MRS1	YGR056W	RSC1

YLR357W	RSC2	YAR003W	SWD1	YMR077C	VPS20
YGL244W	RTF1	YBR175W	SWD3	YKL041W	VPS24
YGL252C	RTG2	YDR126W	SWF1	YPL065W	VPS28
YBL103C	RTG3	YDR334W	SWR1	YHR012W	VPS29
YGR161C	RTS3	YJL004C	SYS1	YDR495C	VPS3
YBR095C	RXT2	YDR145W	TAF12	YJL154C	VPS35
YDR159W	SAC3	YPL129W	TAF14	YLR417W	VPS36
YDR389W	SAC7	YOR337W	TEA1	YLR360W	VPS38
YER120W	SCS2	YKL081W	TEF4	YPR173C	VPS4
YDR469W	SDC1	YHR167W	THP2	YDR080W	VPS41
YJL168C	SET2	YPR040W	TIP41	YKR020W	VPS51
YLR058C	SHM2	YOL018C	TLG2	YDR484W	VPS52
YGR112W	SHY1	YJR066W	TOR1	YJL029C	VPS53
YLR079W	SIC1	YNL079C	TPM1	YDR027C	VPS54
YBR077C	SLM4	YBR126C	TPS1	YDR200C	VPS64
YHR030C	SLT2	YML014W	TRM9	YAL002W	VPS8
YGR229C	SMI1	YML085C	TUB1	YML097C	VPS9
YDR477W	SNF1	YOR187W	TUF1	YLR337C	VRP1
YPL002C	SNF8	YCR084C	TUP1	YOR043W	WHI2
YJR104C	SOD1	YHR111W	UBA4	YNL107W	YAF9
YEL031W	SPF1	YER151C	UBP3	YNL064C	YDJ1
YOL148C	SPT20	YDR207C	UME6	YGL081W	YGL081W
YDR392W	SPT3	YNL229C	URE2	YGR206W	YGR206W
YBR081C	SPT7	YLR386W	VAC14	YLR200W	YKE2
YLR055C	SPT8	YEL013W	VAC8	YKR074W	YKR074W
YCR081W	SRB8	YOR106W	VAM3	YMR073C	YMR073C
YLR119W	SRN2	YGL212W	VAM7	YMR166C	YMR166C
YAL005C	SSA1	YML115C	VAN1	YPL144W	YPL144W
YDR293C	SSD1	YLR410W	VIP1	YLR262C	YPT6
YPL042C	SSN3	YPR036W	VMA13	YML001W	YPT7
YMR125W	STO1	YKL080W	VMA5	YJL139C	YUR1
YDR320C	SWA2	YKL119C	VPH2	YMR273C	ZDS1
YAL011W	SWC3	YPL045W	VPS16		

Level 5 Genes (Rapamycin Filtered) (256 Genes)

YFL039C	ACT1	YJR122W	CAF17	YDL160C	DHH1
YDR448W	ADA2	YNL288W	CAF40	YHR011W	DIA4
YNL148C	ALF1	YGR036C	CAX4	YDR069C	DOA4
YPL195W	APL5	YMR038C	CCS1	YBR278W	DPB3
YGR261C	APL6	YBR131W	CCZ1	YAL026C	DRS2
YIL040W	APQ12	YDR364C	CDC40	YGL043W	DST1
YBR164C	ARL1	YCR094W	CDC50	YKL204W	EAP1
YPL051W	ARL3	YLR418C	CDC73	YBR078W	ECM33
YLR085C	ARP6	YLR330W	CHS5	YGR200C	ELP2
YLR242C	ARV1	YEL061C	CIN8	YPL086C	ELP3
YLR423C	ATG17	YOR061W	CKA2	YMR312W	ELP6
YAL020C	ATS1	YNL298W	CLA4	YIL005W	EPS1
YJL095W	BCK1	YPR120C	CLB5	YGL054C	ERV14
YLR399C	BDF1	YNR041C	COQ2	YOR033C	EXO1
YER155C	BEM2	YNR010W	CSE2	YNL127W	FAR11
YNL271C	BNI1	YKL139W	CTK1	YCR034W	FEN1
YDL074C	BRE1	YPR124W	CTR1	YNL135C	FPR1
YPL084W	BRO1	YPL170W	DAP1	YJR040W	GEF1
YBR290W	BSD2	YGR092W	DBF2	YGL020C	GET1
YFL025C	BST1	YAL013W	DEP1	YER083C	GET2
YAR014C	BUD14	YOR030W	DFG16	YDL198C	GGC1
YLR074C	BUD20	YMR238W	DFG5	YNL153C	GIM3

YDR507C	GIN4	YGL167C	PMR1	YMR125W	STO1
YER040W	GLN3	YDR435C	PPM1	YDR320C	SWA2
YHR183W	GND1	YOL061W	PRS5	YAL011W	SWC3
YHL031C	GOS1	YML017W	PSP2	YAR003W	SWD1
YML121W	GTR1	YDL006W	PTC1	YBR175W	SWD3
YGR163W	GTR2	YEL037C	RAD23	YDR126W	SWF1
YOR070C	GYP1	YGL058W	RAD6	YDR334W	SWR1
YGL237C	HAP2	YJR033C	RAV1	YGR129W	SYF2
YBL021C	HAP3	YDR195W	REF2	YJL004C	SYS1
YOR358W	HAP5	YDR028C	REG1	YDR145W	TAF12
YJR139C	HOM6	YFL033C	RIM15	YPL129W	TAF14
YBR133C	HSL7	YOR275C	RIM20	YOR337W	TEA1
YGL168W	HUR1	YNL294C	RIM21	YKL081W	TEF4
YLR384C	IKI3	YGL045W	RIM8	YHR167W	THP2
YCR071C	IMG2	YGR180C	RNR4	YPR040W	TIP41
YER019W	ISC1	YBR229C	ROT2	YOL018C	TLG2
YKL032C	IXR1	YGL070C	RPB9	YJR066W	TOR1
YDR017C	KCS1	YMR142C	RPL13B	YNL079C	TPM1
YPR159W	KRE6	YOR312C	RPL20B	YBR126C	TPS1
YKL110C	KTI12	YIL052C	RPL34B	YML014W	TRM9
YJL134W	LCB3	YNL302C	RPS19B	YML085C	TUB1
YNL323W	LEM3	YBL072C	RPS8A	YOR187W	TUF1
YPL055C	LGE1	YIL153W	RRD1	YCR084C	TUP1
YKL073W	LHS1	YPL152W	RRD2	YHR111W	UBA4
YDR378C	LSM6	YHR031C	RRM3	YDL122W	UBP1
YEL053C	MAK10	YGR056W	RSC1	YER151C	UBP3
YBR298C	MAL31	YLR357W	RSC2	YOR075W	UFE1
YLR368W	MDM30	YGL244W	RTF1	YDR207C	UME6
YGL219C	MDM34	YGL252C	RTG2	YNL229C	URE2
YLR288C	MEC3	YBL103C	RTG3	YLR386W	VAC14
YJR077C	MIR1	YGR161C	RTS3	YEL013W	VAC8
YNL076W	MKS1	YBR095C	RXT2	YOR106W	VAM3
YDR245W	MNN10	YDR159W	SAC3	YGL212W	VAM7
YJR074W	MOG1	YDR389W	SAC7	YML115C	VAN1
YNL297C	MON2	YCR008W	SAT4	YLR410W	VIP1
YIR021W	MRS1	YER120W	SCS2	YPR036W	VMA13
YML128C	MSC1	YDR469W	SDC1	YKL080W	VMA5
YDR335W	MSN5	YJL168C	SET2	YKL119C	VPH2
YMR287C	MSU1	YLR058C	SHM2	YPL045W	VPS16
YDR162C	NBP2	YGR112W	SHY1	YMR077C	VPS20
YNL119W	NCS2	YLR079W	SIC1	YKL041W	VPS24
YGL211W	NCS6	YBR077C	SLM4	YPL065W	VPS28
YDR176W	NGG1	YHR030C	SLT2	YHR012W	VPS29
YKL057C	NUP120	YGR229C	SMI1	YDR495C	VPS3
YML103C	NUP188	YDR477W	SNF1	YJL154C	VPS35
YHL029C	OCA5	YPL002C	SNF8	YLR417W	VPS36
YHR073W	OSH3	YJR104C	SOD1	YLR360W	VPS38
YML019W	OST6	YMR066W	SOV1	YPR173C	VPS4
YDR071C	PAA1	YEL031W	SPF1	YDR080W	VPS41
YGR078C	PAC10	YOL148C	SPT20	YKR020W	VPS51
YBR221C	PDB1	YDR392W	SPT3	YDR484W	VPS52
YCR044C	PER1	YBR081C	SPT7	YJL029C	VPS53
YOL003C	PFA4	YLR055C	SPT8	YDR027C	VPS54
YJL179W	PFD1	YCR081W	SRB8	YDR200C	VPS64
YGL025C	PGD1	YLR119W	SRN2	YAL002W	VPS8
YNL097C	PHO23	YAL005C	SSA1	YML097C	VPS9
YHR034C	PIH1	YDR293C	SSD1	YLR337C	VRP1
YBL051C	PIN4	YPL042C	SSN3	YOR043W	WHI2
YMR123W	PKR1	YHR064C	SSZ1	YNL107W	YAF9

YNL064C	YDJ1	YKR074W	YKR074W	YML001W	YPT7
YGL081W	YGL081W	YMR073C	YMR073C	YJL139C	YUR1
YGR206W	YGR206W	YMR166C	YMR166C	YMR273C	ZDS1
YHR045W	YHR045W	YPL144W	YPL144W		
YLR200W	YKE2	YLR262C	YPT6		

Level 6 Genes (Rapamycin Filtered) (257 Genes)

YFL039C	ACT1	YKL204W	EAP1	YNL297C	MON2
YDR448W	ADA2	YBR078W	ECM33	YIR021W	MRS1
YNL148C	ALF1	YGR200C	ELP2	YML128C	MSC1
YPL195W	APL5	YPL086C	ELP3	YDR335W	MSN5
YGR261C	APL6	YMR312W	ELP6	YMR287C	MSU1
YIL040W	APQ12	YIL005W	EPS1	YDR162C	NBP2
YBR164C	ARL1	YGL054C	ERV14	YNL119W	NCS2
YPL051W	ARL3	YOR033C	EXO1	YGL211W	NCS6
YLR085C	ARP6	YNL127W	FAR11	YDR176W	NGG1
YLR242C	ARV1	YCR034W	FEN1	YKL057C	NUP120
YLR423C	ATG17	YNL135C	FPR1	YML103C	NUP188
YAL020C	ATS1	YJR040W	GEF1	YHL029C	OCA5
YJL095W	BCK1	YGL020C	GET1	YHR073W	OSH3
YLR399C	BDF1	YER083C	GET2	YML019W	OST6
YER155C	BEM2	YDL198C	GGC1	YDR071C	PAA1
YNL271C	BNI1	YNL153C	GIM3	YGR078C	PAC10
YDL074C	BRE1	YDR507C	GIN4	YBR221C	PDB1
YPL084W	BRO1	YER040W	GLN3	YCR044C	PER1
YBR290W	BSD2	YHR183W	GND1	YOL003C	PFA4
YFL025C	BST1	YHL031C	GOS1	YJL179W	PFD1
YAR014C	BUD14	YML121W	GTR1	YGL025C	PGD1
YLR074C	BUD20	YGR163W	GTR2	YNL097C	PHO23
YJR122W	CAF17	YOR070C	GYP1	YHR034C	PIH1
YNL288W	CAF40	YGL237C	HAP2	YBL051C	PIN4
YGR036C	CAX4	YBL021C	HAP3	YMR123W	PKR1
YMR038C	CCS1	YOR358W	HAP5	YGL167C	PMR1
YBR131W	CCZ1	YJR139C	HOM6	YDR435C	PPM1
YDR364C	CDC40	YBR133C	HSL7	YOL061W	PR5
YCR094W	CDC50	YGL168W	HUR1	YML017W	PSP2
YLR418C	CDC73	YLR384C	IKI3	YDL006W	PTC1
YLR330W	CHS5	YCR071C	IMG2	YEL037C	RAD23
YEL061C	CIN8	YER019W	ISC1	YGL058W	RAD6
YOR061W	CKA2	YKL032C	IXR1	YJR033C	RAV1
YNL298W	CLA4	YDR017C	KCS1	YDR195W	REF2
YPR120C	CLB5	YPR159W	KRE6	YDR028C	REG1
YNR041C	COQ2	YKL110C	KTI12	YFL033C	RIM15
YNR010W	CSE2	YJL134W	LCB3	YOR275C	RIM20
YKL139W	CTK1	YNL323W	LEM3	YNL294C	RIM21
YPR124W	CTR1	YPL055C	LGE1	YGL045W	RIM8
YPL170W	DAP1	YKL073W	LHS1	YGR180C	RNR4
YGR092W	DBF2	YDR378C	LSM6	YBR229C	ROT2
YAL013W	DEP1	YEL053C	MAK10	YGL070C	RPB9
YOR030W	DFG16	YBR298C	MAL31	YMR142C	RPL13B
YMR238W	DFG5	YLR368W	MDM30	YOR312C	RPL20B
YDL160C	DHH1	YGL219C	MDM34	YIL052C	RPL34B
YHR011W	DIA4	YLR288C	MEC3	YNL302C	RPS19B
YDR069C	DOA4	YJR077C	MIR1	YBL072C	RPS8A
YBR278W	DPB3	YNL076W	MKS1	YIL153W	RRD1
YAL026C	DRS2	YDR245W	MNN10	YPL152W	RRD2
YGL043W	DST1	YJR074W	MOG1	YHR031C	RRM3

YGR056W	RSC1	YDR320C	SWA2	YKL119C	VPH2
YLR357W	RSC2	YAL011W	SWC3	YPL045W	VPS16
YGL244W	RTF1	YAR003W	SWD1	YMR077C	VPS20
YGL252C	RTG2	YBR175W	SWD3	YKL041W	VPS24
YBL103C	RTG3	YDR126W	SWF1	YPL065W	VPS28
YGR161C	RTS3	YDR334W	SWR1	YHR012W	VPS29
YBR095C	RXT2	YGR129W	SYF2	YDR495C	VPS3
YDR159W	SAC3	YJL004C	SYS1	YJL154C	VPS35
YDR389W	SAC7	YDR145W	TAF12	YLR417W	VPS36
YCR008W	SAT4	YPL129W	TAF14	YLR360W	VPS38
YER120W	SCS2	YOR337W	TEA1	YPR173C	VPS4
YDR469W	SDC1	YKL081W	TEF4	YDR080W	VPS41
YJL168C	SET2	YHR167W	THP2	YKR020W	VPS51
YLR058C	SHM2	YPR040W	TIP41	YDR484W	VPS52
YGR112W	SHY1	YOL018C	TLG2	YJL029C	VPS53
YLR079W	SIC1	YJR066W	TOR1	YDR027C	VPS54
YBR077C	SLM4	YNL079C	TPM1	YDR200C	VPS64
YHR030C	SLT2	YBR126C	TPS1	YAL002W	VPS8
YGR229C	SMI1	YML014W	TRM9	YML097C	VPS9
YDR477W	SNF1	YML085C	TUB1	YLR337C	VRP1
YPL002C	SNF8	YOR187W	TUF1	YOR043W	WHI2
YJR104C	SOD1	YCR084C	TUP1	YNL107W	YAF9
YMR066W	SOV1	YHR111W	UBA4	YNL064C	YDJ1
YEL031W	SPF1	YDL122W	UBP1	YGL081W	YGL081W
YOL148C	SPT20	YER151C	UBP3	YGR206W	YGR206W
YDR392W	SPT3	YOR075W	UFE1	YHR045W	YHR045W
YBR081C	SPT7	YDR207C	UME6	YLR200W	YKE2
YLR055C	SPT8	YNL229C	URE2	YKR074W	YKR074W
YCR081W	SRB8	YLR386W	VAC14	YMR073C	YMR073C
YLR119W	SRN2	YEL013W	VAC8	YMR166C	YMR166C
YAL005C	SSA1	YOR106W	VAM3	YPL144W	YPL144W
YDR293C	SSD1	YGL212W	VAM7	YLR262C	YPT6
YPL042C	SSN3	YML115C	VAN1	YML001W	YPT7
YHR064C	SSZ1	YLR410W	VIP1	YJL139C	YUR1
YHR084W	STE12	YPR036W	VMA13	YMR273C	ZDS1
YMR125W	STO1	YKL080W	VMA5		