

**Table S2** List of enhancers and suppressors of the DNA polymerase mutants (q<0.05)

	<b>Negative interactions</b>	<b>Positive interactions</b>
Pol $\alpha$ ( <i>pol1-4</i> )	<i>AIM29 ALT1 APQ12 ASF1 ATG3 BDF2 BMH1 BRE1 BUD21 BUD28 CAF40 CHD1 CIK1 CLA4 CSM3 CTF18 CTF4 CTF8 DDC1 DOT1 EAP1 ELC1 ELP6 FRS2 GIM4 GPB2 HDA3 HIR3 HPC2 HTZ1 IES5 IMP2' IPP1 LEA1 LSM6 LSM7 MF(ALPHA)1 MRC1 MTC1 MTC4 MTC6 MUP1 NCB2 NHP10 NHP2 NMD2 NST1 PAT1 PBY1 PET20 POL32 PPH21 PSY1 PUS7 RAD17 RAD24 RAD50 RAD52 RAD57 RAD9 RE1 RIF1 RPB7 RPC11 RPL14A RPL31B RPS0B RPS1B RPS20 RPS4A RPS9B RRD1 RRD2 RSC8 RTF1 RTT10 SGS1 SHR3 SIS2 SKO1 SMI1 SOK1 SOK2 SPE1 SPN1 SPT2 SRS2 ST11 SUI2 SWC5 SWD1 SWD3 TCO89 TEN1 TIF5 TIM10 TIM50 TPK3 TPT1 TRM11 UBA4 UPF3 VMS1 VPS63 XRS2 YBR099C YBR100W YDR269C YGL042C YJR087W YKE2 YKL069W YKL075C YLR339C YLR374C YMD8 YMR166C YMR245W YNL171C YNL235C YOL134C YPD1 YPL205C YPR050C YPR153W YPT6 :::MRC1</i>	<i>ALD3 ARA1 CHK1 CKB1 EMI5 EXO1 GPH1 HIS3 IRC14 NAT1 PGM2 PIB2 PNG1 PRM4 PUF6 RTT107 SAC7 TEM1 TOS3 UBP3 VPS60 YDL109C YDR262W YPK3 YPS6 ZRG8</i>
Pol $\delta$ ( <i>cdc2-2</i> )	<i>BMH1 BRE1 CAF40 CFD1 DDC1 GPI15 HTZ1 INO2 INP52 IPP1 LEA1 LGE1 NCB2 NMD2 PKR1 PMR1 POL32 PRE8 PRI1 RAD17 RAD24 RAD50 RAD51 RAD52 RAD54 RAD55 RAD57 RAD9 RFC5 RMI1 SAD1 SHR3 SMI1 SPE1 TEN1 XRS2 YDR269C YLR339C YNL011C</i>	
Pol $\epsilon$ ( <i>pol2-12</i> )	<i>AIM4 ARC18 ARP4 ARP6 ASF1 ATG21 ATO2 AZF1 BEM1 BET3 BFA1 BPH1 BRE1 BRE2 BUB2 BUD27 CAF40 CAT5 CDC21 CDC33 CHK1 CHS5 CKB1 CKB2 CLB2 CLB5 CSM3 CTF18 CTF8 DCC1 DCR2 DDC1 DEG1 DFG16 DIA2 DPB11 DPB2 DPB3 DPH2 DPH5 DPH6 DST1 ELF1 ELP3 EPG1 ERG3 ESBP6 ETP1 GCS1 GET3 GIM3 GIM4 GPB1 GYP1 HCR1 HDA1 HDA3 HIR2 HOS2 HPC2 HTZ1 IES5 ILM1 INP52 IPK1 IPP1 JJJ3 LAP2 LEA1 LGE1 LSM1 LSM7 LSP1 LTE1 MID1 MIT1 MMS22 MRC1 MRL1 MRN1 MTC1 MTC4 NCB2 NGL2 NHP10 NOP4 NPR3 NST1 NUP133 NUP188 PAT1 PCP1 PER1 PET130 PKP1 POL32 PPH21 PRE9 PSF1 PSF2 RAD17 RAD24 RAD50 RAD52 RAD57 RAD9 RIM101 RIM13 RIM21 RIM8 RIM9 RRD2 RRM3 RRN9 RTF1 RXT3 SAC3 SAD1 SAF1 SAP190 SET3 SGF29 SHE1 SHE4 SHR3 SIF2 SIR1 SIW14 SLT2 SMI1 SNT1 SNX3 SOH1 SOK2 SPN1 SRB2 SRN2 SRS2 SSO2 SWC5 SWD1 SWD3 SWF1 SWR1 TCO89 TIF5 TIM50 TRR2 TRS20 TRS85 TUM1 UBA4 UME6 URM1 VAC8 VAM10 VHS3 VID22 VIP1 VMS1 VPS13 VPS17 VPS21 VPS29 VPS30 VPS5 VPS55 VPS60 VPS63 VPS71 VPS8 XRN1 XRS2 YDR090C YGL042C YGL046W YGR122W YGR237C YJL169W YLR339C YNL235C YOL050C YPL205C YSC83 YSP1</i>	<i>AIM14 ALG6 ALG7 APC4 ARO2 ARV1 ATG16 BAG7 BRP1 BRX1 BTN2 BTS1 CIA1 DAS2 DBF2 DBP3 EIS1 ERP6 ERV25 FIN1 FLC2 FLC3 GCN1 GEP7 GLO2 GPI15 GUT2 HEM13 HEM3 HFD1 HOM2 HUL5 ICP55 IRC5 IRC7 MAF1 MCM3 MDS3 MMS2 MRT4 NDE1 NOP1 NOP56 NTH1 ORM1 PCF11 PDC1 PDX1 PEX32 PHO5 PLB1 PML1 PPT1 PRE2 PRP11 PRP38 PUF6 RAD10 RCK1 RGR1 RIS1 RKM2 RPA43 RPC17 RPC19 RPL13A RPL16A RPL23A RPL24B RPL29 RPL2A RPL35B RPL37B RPL9A RPN12 RPN14 RPN6 RPN7 RPP1B RPS10A RPS17B RPT3 RTG2 SAP4 SCW11 SDS3 SEC20 SGF73 SIP5 SLX9 SNM1 SPO20 SPT21 SSF1 SUP45 SWI4 TAF12 TFA2 TFB4 TIF6 TOM22 TPA1 TPC1 TPP1 TVP23 UBP3 VID30 VT11 YCL022C YDR161W YDR537C YFR035C YGL036W YGL109W YGL117W YGL118C YGL159W YGL165C YGL176C YGR026W YGR051C YGR283C YHR049C-A YHR202W YIP4 YKL177W YML102C-A YMR034C YMR144W YMR196W YOL035C YPD1 YPR142C YRB1</i>