

Supplementary material

Importance of Pol η for damage-induced cohesion reveals differential regulation of cohesion establishment at the break site and genome-wide

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Table S1. Strains used in this study

All strains used are haploid and of W303 origin (*ade2-1*, *trp1-1*, *can1-100*, *leu2-3*, 112, *his3-11*, 15, *ura3-1*, *RAD5*, *GAL*, *psi+*)

Strain	Genotype
LS6	<i>MATa</i> , <i>ECO1-myc₁₃:kanMX6</i>
LS7	<i>MATa</i> , <i>RAD30-myc₁₃:kanMX6</i>
LS11	<i>MATalpha</i> , <i>pol30-K167R</i> , <i>ade3::pGAL:HO</i> , <i>leu2::pGAL-scc1-R180D</i> , <i>R268D-HA₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS28	<i>MATa</i> , <i>rad30::kanMX6</i> , <i>rad52::HISMX6</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS29	<i>MATa</i> , <i>rad30::kanMX6</i> , <i>lig4::HISMX6</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS38	<i>MATalpha::natMX4</i> , <i>ade3::pGAL:HO</i> , <i>smc1-259</i> , <i>leu2::pGAL-SMC1-myc₁₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS39	<i>MATalpha::natMX4</i> , <i>ade3::pGAL:HO</i> , <i>3'URA3::HOcs::hphMX4</i> , <i>smc1-259</i> , <i>leu2::pGAL-SMC1-myc₁₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS40	<i>MATalpha::natMX4</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>smc1-259</i> , <i>leu2::pGAL-SMC1-myc₁₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS41	<i>MATalpha::natMX4</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>3'URA3::HOcs::hphMX4</i> , <i>smc1-259</i> , <i>leu2::pGAL-SMC1-myc₁₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS61	<i>MATalpha</i> , <i>rad30-F627A,F628A::natMX4</i> , <i>ade3::pGAL:HO</i> , <i>leu2::pGAL-scc1-R180D</i> , <i>R268D-HA₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS69	<i>MATalpha::natMX4</i> , <i>ade3::pGAL:HO</i> , <i>3'URA3::Hocs::hphMX4</i> , <i>smc1-259</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS72	<i>MATalpha::natMX4</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>3'URA3::HOcs::hphMX4</i> , <i>smc1-259</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i> ,
LS73	<i>MATa</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>3'URA3::HOcs::hphMX4</i> , <i>smc1-259</i>
LS79	<i>MATa</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS80	<i>MATalpha</i> , <i>ade3::pGAL:HO</i> , <i>ura3::pGAL-SCC1-HA₆:URA3</i>
LS81	<i>MATalpha::natMX4</i> , <i>ade3::pGAL:HO</i> , <i>ura3::pGAL-SCC1-HA₆:URA3</i>
LS82	<i>MATalpha</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>ura3::pGAL-SCC1-HA₆:URA3</i>
LS83	<i>MATalpha::natMX4</i> , <i>rad30::kanMX6</i> , <i>ade3::pGAL:HO</i> , <i>ura3::pGAL-SCC1-HA₆:URA3</i>
LS87	<i>MATalpha</i> , <i>rev3::hphMX4</i> , <i>ade3::pGAL:HO</i> , <i>leu2::pGAL-scc1-R180D</i> , <i>R268D-HA₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS89	<i>MATalpha</i> , <i>rev1::hphMX4</i> , <i>ade3::pGAL:HO</i> , <i>leu2::pGAL-scc1-R180D</i> , <i>R268D-HA₃:LEU2</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>
LS105	<i>MATa</i> , <i>rev1::natMX4</i> , <i>rev3::hphMX4</i> , <i>rad30::kanMX6</i> , <i>his3::TetR-GFP:HIS3</i> , <i>ura3::TetOs:URA3</i>

LS112	<i>MATalpha, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, trp1::pGAL-ECO1:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
LS114	<i>MATalpha, ade3::pGAL:HO, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, trp1::pGAL-ECO1:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
LS116	<i>MATalpha, rad30::kanMX6, ade3::pGAL:HO, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, trp1::pGAL-ECO1:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
LS118	<i>MATalpha, rad30::kanMX6, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, trp1::pGAL-ECO1:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
LS166	<i>MATalpha, rad30-D570A:natMX4, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3, PDS1-myc₁₈:TRP1</i>
LS173	<i>MATa, leu2::pGAL:SCC1-HA₆:LEU2, scc1-73, his3::TetR-GFP:HIS3, ura3::TetOs:URA3, ade3::pGAL:HO</i>
LS174	<i>MATa, leu2::pGAL:scc1-K84Q,K210Q-HA₆:LEU2, scc1-73, his3::TetR-GFP:HIS3, ura3::TetOs:URA3, ade3::pGAL:HO</i>
LS175	<i>MATa, rad30::kanMX6, leu2::pGAL:SCC1-HA₆:LEU2, scc1-73, his3::TetR-GFP:HIS3, ura3::TetOs:URA3, ade3::pGAL:HO</i>
LS176	<i>MATa, rad30::kanMX6, leu2::pGAL:scc1-K84Q,K210Q-HA₆:LEU2, scc1-73, his3::TetR-GFP:HIS3, ura3::TetOs:URA3, ade3::pGAL:HO</i>
LS194	<i>MATalpha::natMX4, rad30::kanMX6, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
LS234	<i>MATa, rad30-D30A-myc₁₃:kanMX6</i>
LS236	<i>MATa, rad30-E39A-myc₁₃:kanMX6</i>
LS237	<i>MATa, rad30-D155A-myc₁₃:kanMX6</i>
LS240	<i>MATa, ECO1-myc₁₃:kanMX6, rad30::natMX4</i>
CB67	<i>MATa</i>
CB328	<i>MATalpha, rad52::HIS3MX6</i>
CB423	<i>MATa, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB469	<i>MATalpha, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB479	<i>MATalpha, ade3::pGAL:HO, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB480	<i>MATa, ade3::pGAL:HO, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB506	<i>MATalpha, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB507	<i>MATa, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB524	<i>MATa, ade3::pGAL:HO, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB582	<i>MATa, ade3::pGAL:HO, smc1-259, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB586	<i>MATalpha::kanMX6, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>

CB612	<i>MATa, rad30::kanMX6, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB625	<i>MATalpha, rad30::kanMX6, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB626	<i>MATalpha, rad30::kanMX6, ade3::pGAL:HO, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB627	<i>MATa, rad30::kanMX6, ade3::pGAL:HO, smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB697	<i>MATalpha, rad30::kanMX6 smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB698	<i>MATa, rad30::kanMX6 smc1-259, leu2::pGAL-SMC1-myc₁₃:LEU2, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB1206	<i>MATa, rad30::kanMX6, pR30.126:LEU2, ade3::pGAL:HO leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB1210	<i>MATa, rad30::kanMX6, pR30.127:LEU2, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB1214	<i>MATa, rad30::kanMX6, pR30.138:LEU2, ade3::pGAL:HO, leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB1218	<i>MATa, rad30::kanMX6, pR30.382:LEU2, ade3::pGAL:HO leu2::pGAL-scc1-R180D, R268D-HA₃:LEU2, PDS1-myc₁₈:TRP1, his3::TetR-GFP:HIS3, ura3::TetOs:URA3</i>
CB1279	<i>MATa, lig4::HIS3MX6</i>