

Table S2 22 genes with synthetic negative interaction with *eso1*-G799D confirmed by dilution analysis.

| gene | geneDescription |
|---------------|---|
| SPBC20F10.02c | DUF1741 family protein |
| SPCC285.16c | MutS protein homolog |
| SPAC664.01c | chromodomain protein Swi6 |
| SPAC11G7.01 | sequence orphan |
| SPAC17A2.06c | WD repeat protein Vps8 (predicted) |
| SPBC19C7.02 | N-end-recognizing protein Ubr1 |
| SPBC19G7.04 | HMG box protein |
| SPCC11E10.08 | silencing protein Rik1 |
| SPCC970.07c | Rik1-associated factor Raf2 |
| SPBC2D10.16 | FANCM-MHF complex subunit Mhf1 |
| SPAC16E8.13 | ubiquitin-protein ligase E3 (predicted) |
| SPBC2D10.17 | cryptic loci regulator Clr1 |
| SPAC9E9.08 | ATRIP, ATR checkpoint kinase regulatory subunit Rad26 |
| SPAC1805.15c | HECT-type ubiquitin-protein ligase Pub2 |
| SPCC1393.10 | copper transporter complex subunit Ctr4 |
| SPAC1B3.03c | cyclophilin family peptidyl-prolyl cis-trans isomerase Wis2 |
| SPAC3G6.09c | trehalose-phosphate synthase Tps2 (predicted) |
| SPAC6G9.15c | sequence orphan |
| SPAC1B3.17 | chromatin silencing protein Clr2 |
| SPAC1071.03c | sequence orphan |
| SPBPB10D8.07c | membrane transporter (predicted) |
| SPCC188.07 | telomere maintenance protein Ccq1 |
| SPAC15E1.07c | meiotic cohesin complex associated protein Moa1 |