Dewar_FigS4

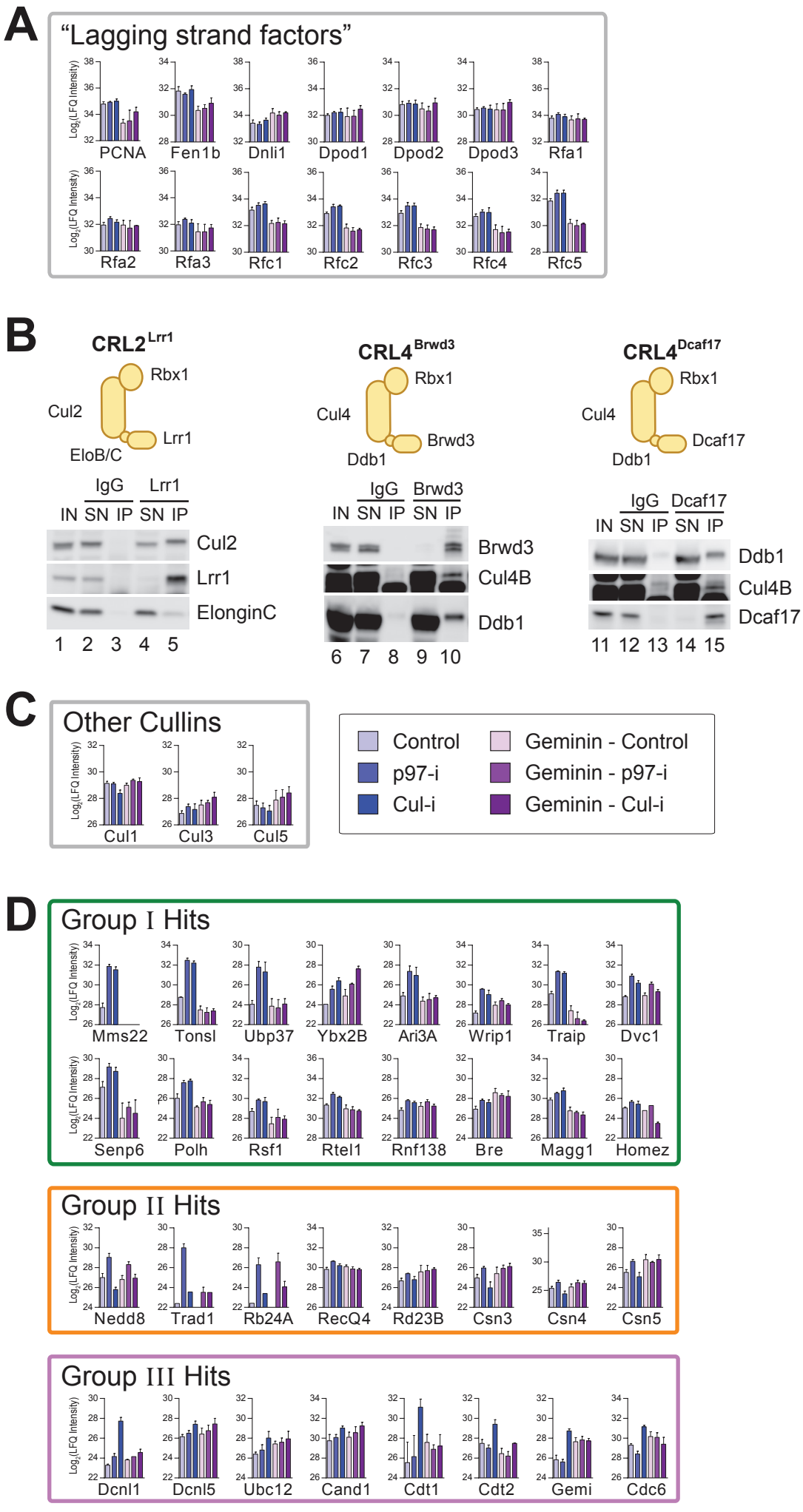
A
"Lagging strand factors"
Log2(LFQ Intensity)
PCNA
Fen1b
Dnli1
Dpod1
Dpod2
Dpod3
Rfa1
Rfa2
Rfa3
Rfc1
Rfc2
Rfc3
Rfc4
Rfc5
B
CRL2Lrr1
Rbx1
Cul2
Lrr1
EloB/C
IgG
Lrr1
IN SN IP SN IP
Cul2
Lrr1
ElonginC
1 2 3 4 5
CRL4Brwd3
Rbx1
Cul4
Brwd3
Ddb1
IgG
Brwd3
IN SN IP SN IP
Brwd3
Cul4B
Ddb1
6 7 8 9 10
CRL4Dcaf17
Rbx1
Cul4
Dcaf17
Ddb1
IgG
Dcaf17
IN SN IP SN IP
Ddb1
Cul4B
Dcaf17
11 12 13 14 15
C
Other Cullins
Cul1
Cul3
Cul5
Control
p97-i
Cul-i
Geminin - Control
Geminin - p97-i
Geminin - Cul-i
D
Group I Hits
Mms22
Tonsl
Ubp37
Ybx2B
Ari3A
Wrip1
Traip
Dvc1
Senp6
Polh
Rsf1
Rtel1
Rnf138
Bre
Magg1
Homez
Group II Hits
Nedd8
Trad1
Rb24A
RecQ4
Rd23B
Csn3
Csn4
Csn5
Group III Hits
Dcnl1
Dcnl5
Ubc12
Cand1
Cdt1
Cdt2
Gemi
Cdc6

Figure S4: Additional validation of the CHROMASS analysis

A. As in Figure 2C but for proteins associated with lagging strand synthesis: PCNA, Fen1b, DNA Ligase 1 (Dnli1), DNA Pol δ (Dpod1, Dpod2, Dpod3), RPA (Rfa1, Rfa2, Rfa3), and RFC (Rfc1-5).

B. Immunoprecipitation of Cullin ligases that were hits in the CHROMASS screen. Cartoons indicate the expected composition of $CRL2^{Lrr1}$, $CRL4^{Dcaf17}$, and $CRL4^{Brwd3}$. Antibodies against the substrate adapters Lrr1, Dcaf17, and Brwd3 were used to carry out immunoprecipitations (IPs), which were analyzed by Western blotting. IPs of Lrr1 co-IP'd the adapter Elongin C and the Cullin Cul2 (Lane 5). IPs of Dcaf17 and Brwd3 co-IP'd the adapter Ddb1 and the Cullin Cul4b (Lanes 10 and 15). IPs performed with control IgGs (Lanes 3, 8, 13) failed to detect Elongin C, Cul2, Ddb1, or Cul4. Therefore, complexes of Cul2-Elongin C-Lrr1, Cul4-Ddb1-Dcaf17, and Cul4-Ddb1-Brwd3 exist in extract, supporting the existence of $CRL2^{Lrr1}$, $CRL4^{Dcaf17}$, $CRL4^{Brwd3}$.

C. As in Figure 2E, but for the remaining Cullin scaffolds detected: Cul1, Cul3, and Cul5.

D. As in Figure 2C, but for additional Group I, II, and III hits.