

Figure S1. Sgo1 is a substrate of Cdc20 and Cdh1 *in vitro*. Radiolabeled Sgo1 or Sgo1- Δ db was translated *in vitro* and tested for APC/C-dependent ubiquitination as in Fig. 1A, using either purified Cdc20 or Cdh1 as the activator subunit. All reactions contained E1 and E2. Cdh1 is generally more stable and active than Cdc20 in these assays, resulting in higher activity.

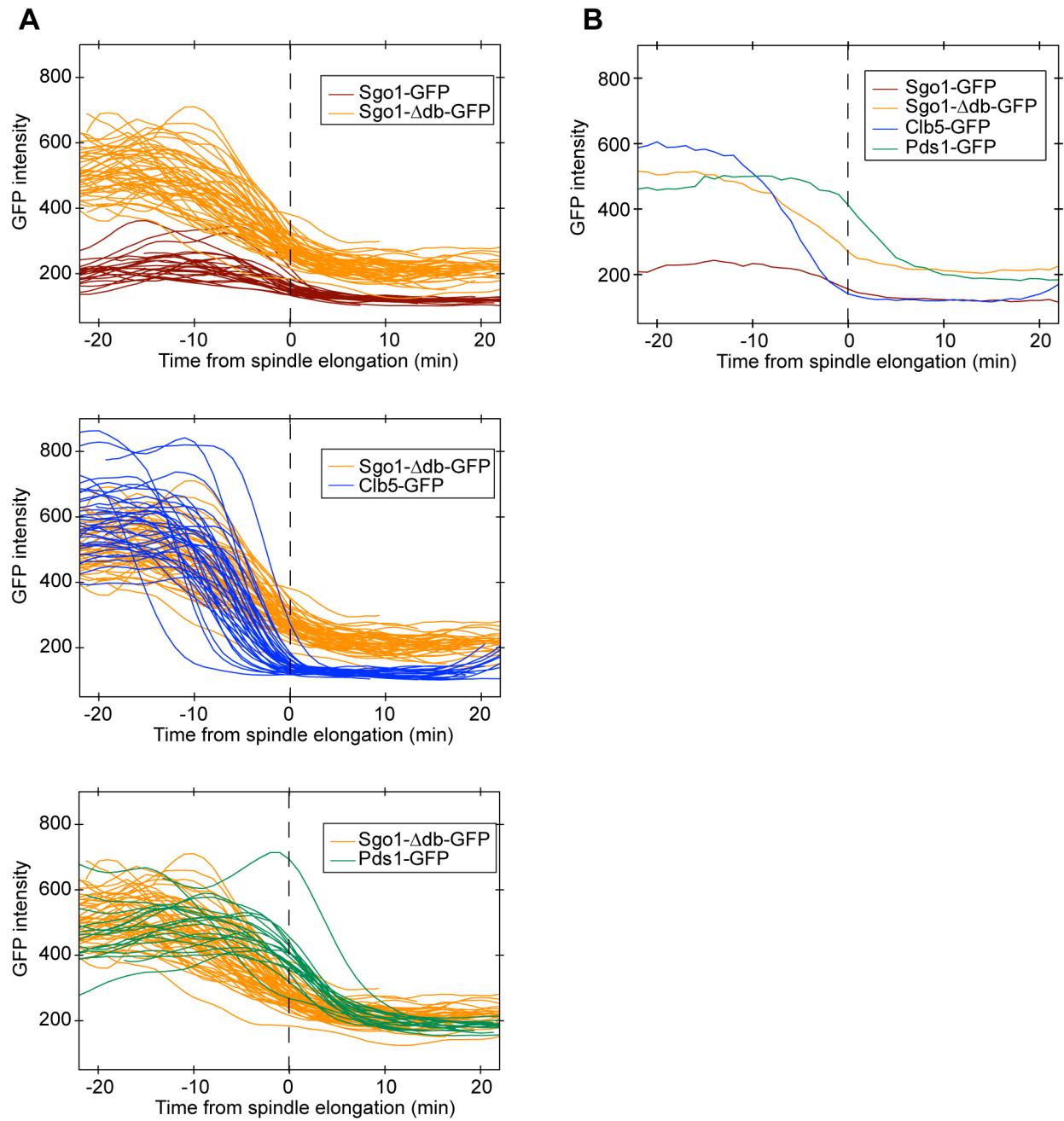


Figure S2. Un-normalized traces of GFP-labeled proteins. (A) Smoothed fluorescence intensity measurements (arbitrary units) of Sgo1-GFP, Sgo1 Δ db-GFP, Clb5-GFP, or Pds1-GFP before normalization for the plots in Fig. 2. (B) Average intensity of un-normalized traces.

Table S1. Strains used in this study.

Strain	Genotype
HE153	<i>SGO1</i> :URA3
HE156	<i>SGO1</i> - db:URA3
HE167	<i>SGO1</i> -GFP:KanMX4, <i>SPC42-mCherry</i> :HIS3
HE168	<i>SGO1</i> - db-GFP:KanMX4, <i>SPC42-mCherry</i> :HIS3
DL009C	<i>CLB5</i> -GFP:URA3, <i>SPC42-mCherry</i> :HIS3
DL009P	<i>PDS1</i> -GFP:URA3, <i>SPC42-mCherry</i> :HIS3
HE297	<i>sgo1</i> -3A- db-GFP:KanMX4, <i>SPC42-mCherry</i> :HIS3
HE217	<i>SGO1</i> - db:URA3, <i>RTS1</i> -GFP:KanMX4, <i>SPC42-mCherry</i> :HIS3
HE213	<i>sgo1</i> -3A- db:URA3, <i>RTS1</i> -GFP:KanMX4, <i>SPC42-mCherry</i> :HIS3
HE294	<i>SGO1</i> - db-GFP:KanMX4, <i>SPC42-mCherry</i> :HIS3, <i>pGAL-CDC20</i> :NatNT2
HE237	<i>SGO1</i> -9myc:HIS3
HE239	<i>sgo1</i> -3A-9myc:HIS3
HE234	<i>RTS1</i> -6HA:NatNT2
HE241	<i>SGO1</i> -9myc:HIS3, <i>RTS1</i> -6HA:NatNT2
HE245	<i>sgo1</i> -3A-9myc:HIS3, <i>RTS1</i> -6HA:NatNT2
HE211	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI</i> :HIS3
HE212	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI-Rts1</i> :HIS3
HE207	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI</i> :HIS3, <i>sgo1</i> :NatNT2
HE209	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI-Rts1</i> :HIS3, <i>sgo1</i> :NatNT2
HE305	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI:cgHIS3</i>
HE307	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI:cgHIS3</i> , <i>sgo1</i> :NatNT2
HE276	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI:cgHIS3</i> , <i>sgo1</i> -3A:URA3
HE266	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI:cgHIS3</i> , <i>rts1</i> :NatNT2
HE309	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI-Rts1:cgHIS3</i>
HE311	<i>CEN5</i> ::256x <i>lacO</i> :LEU2, <i>his3</i> :: <i>pCUP1-GFP-LacI-Rts1:cgHIS3</i> , <i>sgo1</i> :NatNT2
HE312	<i>CEN5</i> ::96x <i>tetO</i> : <i>TRP1</i> , <i>leu2</i> :: <i>pCUP1-GFP-TetR:cgLEU2</i> , <i>his3</i> :: <i>pCUP1-GFP-LacI:cgHIS3</i> , <i>sgo1</i> :NatNT2
HE314	<i>CEN5</i> ::96x <i>tetO</i> : <i>TRP1</i> , <i>leu2</i> :: <i>pCUP1-GFP-TetR:cgLEU2</i> , <i>his3</i> :: <i>pCUP1-GFP-LacI:cgHIS3</i> , <i>sgo1</i> :NatNT2
HE316	<i>CEN5</i> ::96x <i>tetO</i> : <i>TRP1</i> , <i>leu2</i> :: <i>pCUP1-GFP-TetR:cgLEU2</i> , <i>his3</i> :: <i>pCUP1-GFP-LacI-Rts1:cgHIS3</i>
HE318	<i>CEN5</i> ::96x <i>tetO</i> : <i>TRP1</i> , <i>leu2</i> :: <i>pCUP1-GFP-TetR:cgLEU2</i> , <i>his3</i> :: <i>pCUP1-GFP-LacI-Rts1:cgHIS3</i> , <i>sgo1</i> :NatNT2