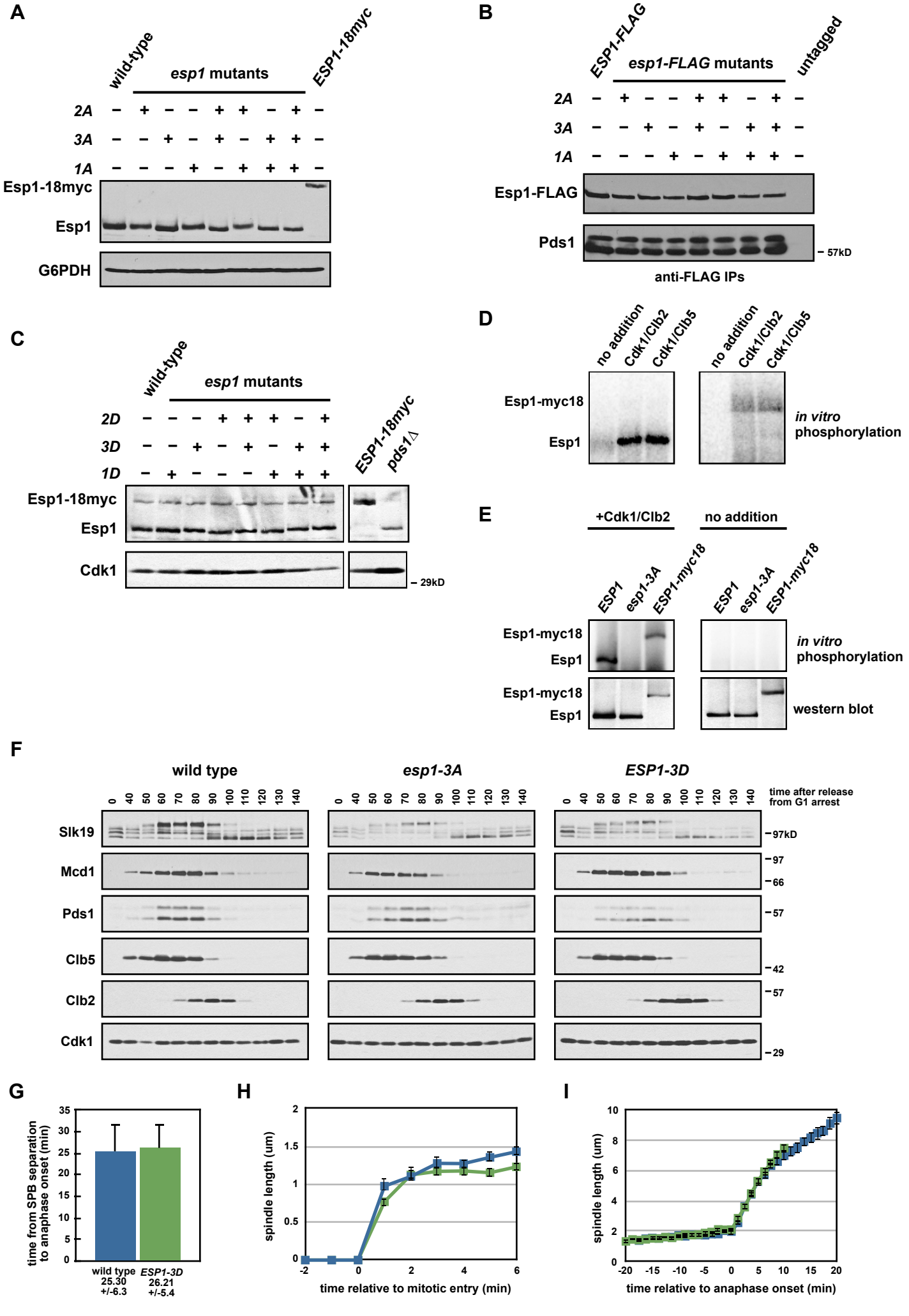
S1 Fig


A
wild-type
esp1 mutants
ESP1-18myc
2A
3A
1A
Esp1-18myc
Esp1
G6PDH
B
ESP1-FLAG
esp1-FLAG mutants
untagged
2A
3A
1A
Esp1-FLAG
Pds1
57kD
anti-FLAG IPs
C
wild-type
esp1 mutants
2D
3D
1D
ESP1-18myc
pds1Δ
Esp1-18myc
Esp1
Cdk1
29kD
D
no addition
Cdk1/Clb2
Cdk1/Clb5
Esp1-myc18
Esp1
in vitro
phosphorylation
E
+Cdk1/Clb2
no addition
ESP1
esp1-3A
ESP1-myc18
Esp1-myc18
Esp1
in vitro
phosphorylation
western blot
F
wild type
esp1-3A
ESP1-3D
time after release
from G1 arrest
0 40 50 60 70 80 90 100 110 120 130 140
Slk19
Mcd1
Pds1
Clb5
Clb2
Cdk1
97kD
97
66
57
42
57
29
G
time from SPB separation
to anaphase onset (min)
wild type
25.30
+/-6.3
ESP1-3D
26.21
+/-5.4
H
spindle length (um)
time relative to mitotic entry (min)
I
spindle length (um)
time relative to anaphase onset (min)