Figure S1. **The membrane binding of Cdc42 to liposomes of different compositions.** Insect (Sf21) cell recombinant Cdc42 (20 pmol) was loaded with [^{35}S]GTPγS and incubated with 200 μL of 1 mg/mL lipids for 5 minutes. The membranes were pelleted by centrifugation, then resuspended in fresh buffer and pelleted once more. Radioactivity was measured in the resulting supernatant (S) and lipid pellet (P). The control lipid composition was 35% cholesterol, 35% PE, 25% PS, and 5% PI, where PIP_2 replaced an equal molar percentage of PI. The lipid raft composition was 30% phosphatidylcholine, 30% sphingomyelin, and 40% cholesterol.

Figure S2. (*A*) Phenylarsine oxide (PAO) growth inhibition of NIH 3T3 cells that stably express Cdc42(F28L). HeLa cells were found to be insensitive to PAO treatment at similar concentrations. In each case, cells were cultured in DMEM 1% serum with the indicated concentrations of PAO. Cells were harvested and counted at 2 day intervals over a one week period as described in *Methods*. Results are the average of three experiments. (*B*) NIH 3T3 fibroblasts stably expressing Cdc42(F28L) were transiently transfected with plasmids encoding either RFP or RFP-MARCKS-ED SA4. At time point zero, the medium was replaced with 1% calf serum/DMEM. The cells were harvested and analyzed by fluorescence microscopy for RFP fluorescence (ex 555 and em 575). Fluorescent cells were counted in two day intervals over a four day period. The data represent the mean of 4 experiments. The expression levels of RFP and RFP-MARCKS-ED SA4 were essentially identical.

Figure S1

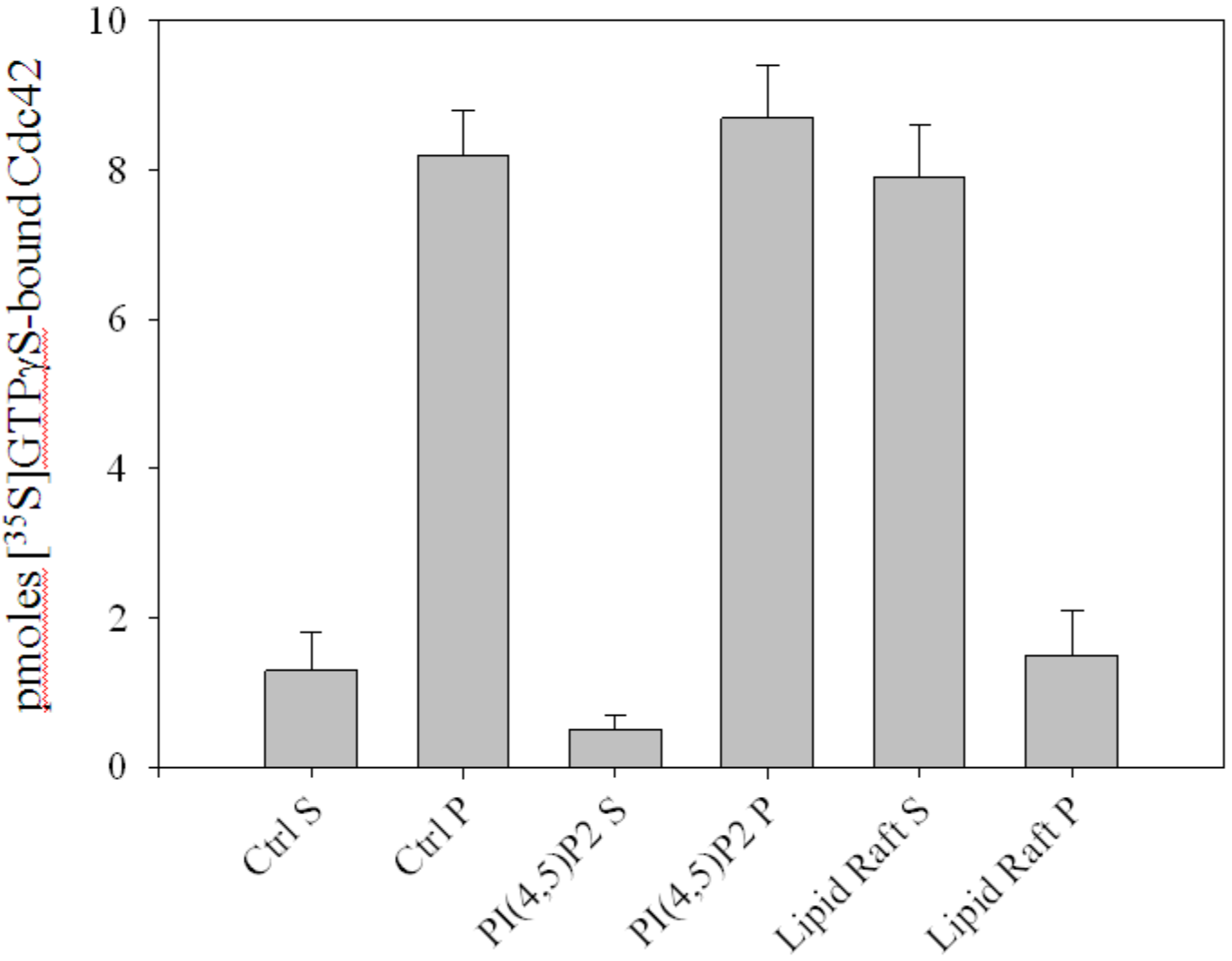

pmoles [35S]GTPγS-bound Cdc42
10
8
6
4
2
0
Ctrl S
Ctrl P
PI(4,5)P2 S
PI(4,5)P2 P
Lipid Raft S
Lipid Raft P

Figure S2

A

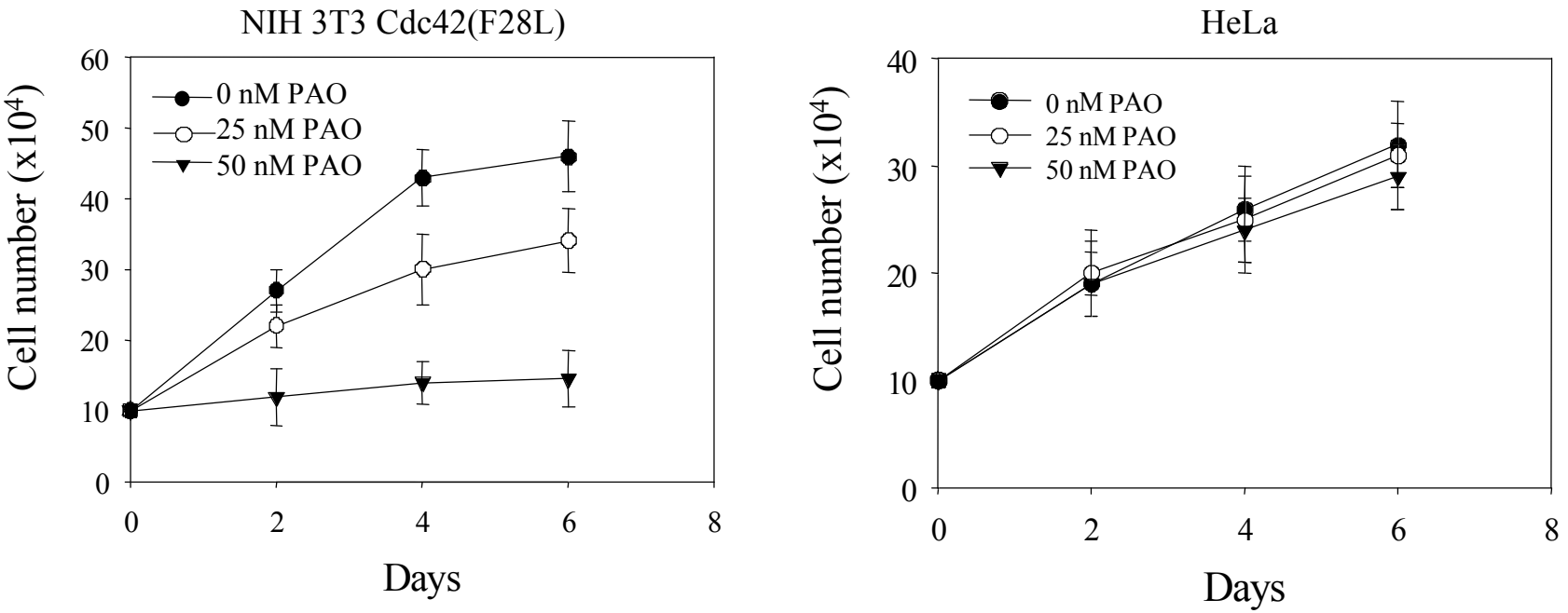
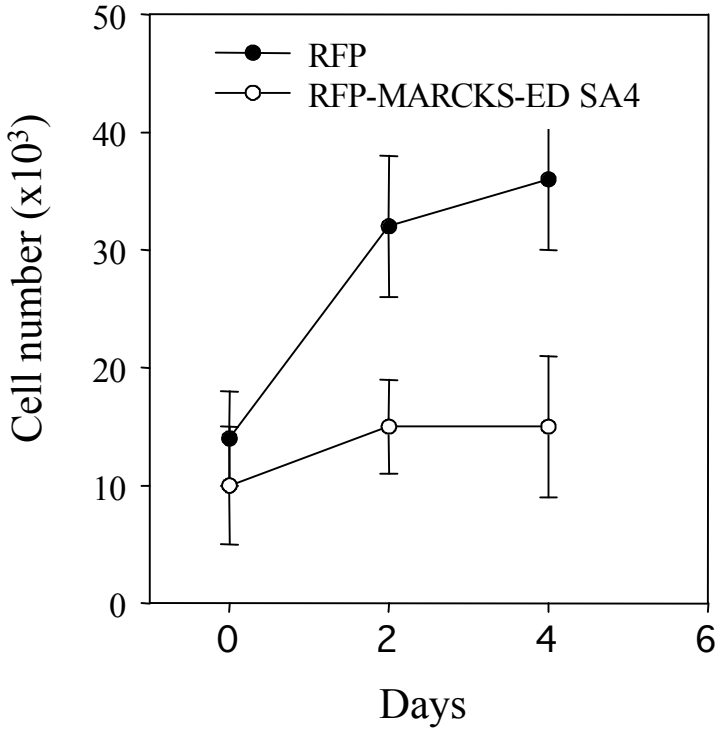

NIH 3T3 Cdc42(F28L)
Cell number (x10^4)
0 nM PAO
25 nM PAO
50 nM PAO
Days
HeLa
Cell number (x10^4)
0 nM PAO
25 nM PAO
50 nM PAO
Days

Figure S2

B


RFP
RFP-MARCKS-ED SA4
Cell number (x10^3)
50
40
30
20
10
0
0
2
4
6
Days