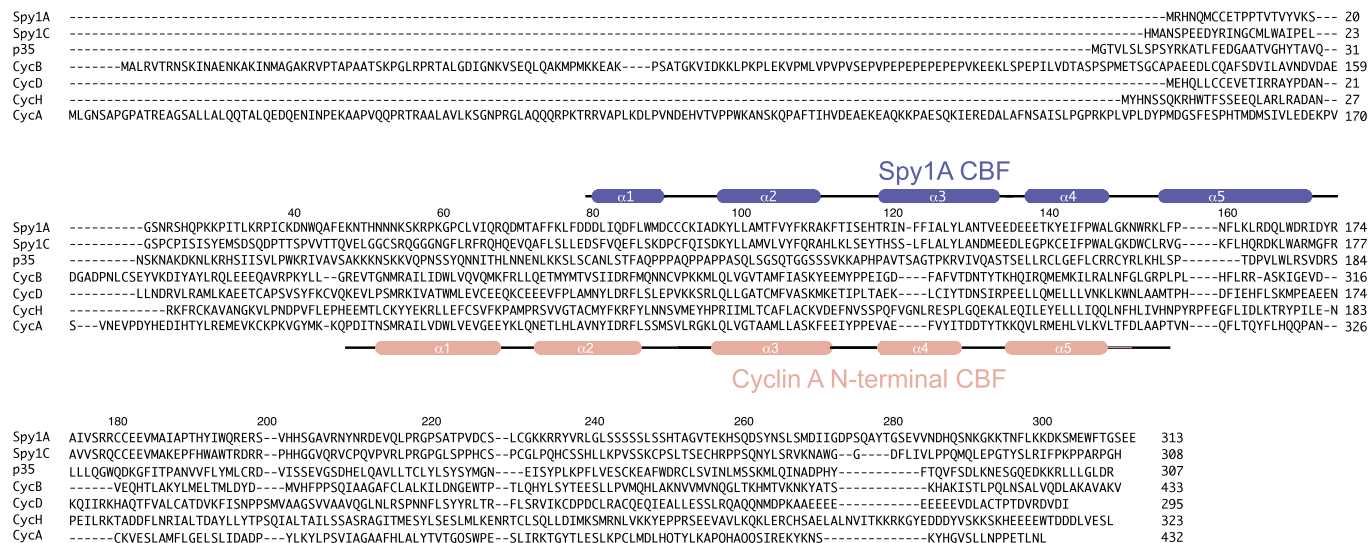


## Expanded View Figures

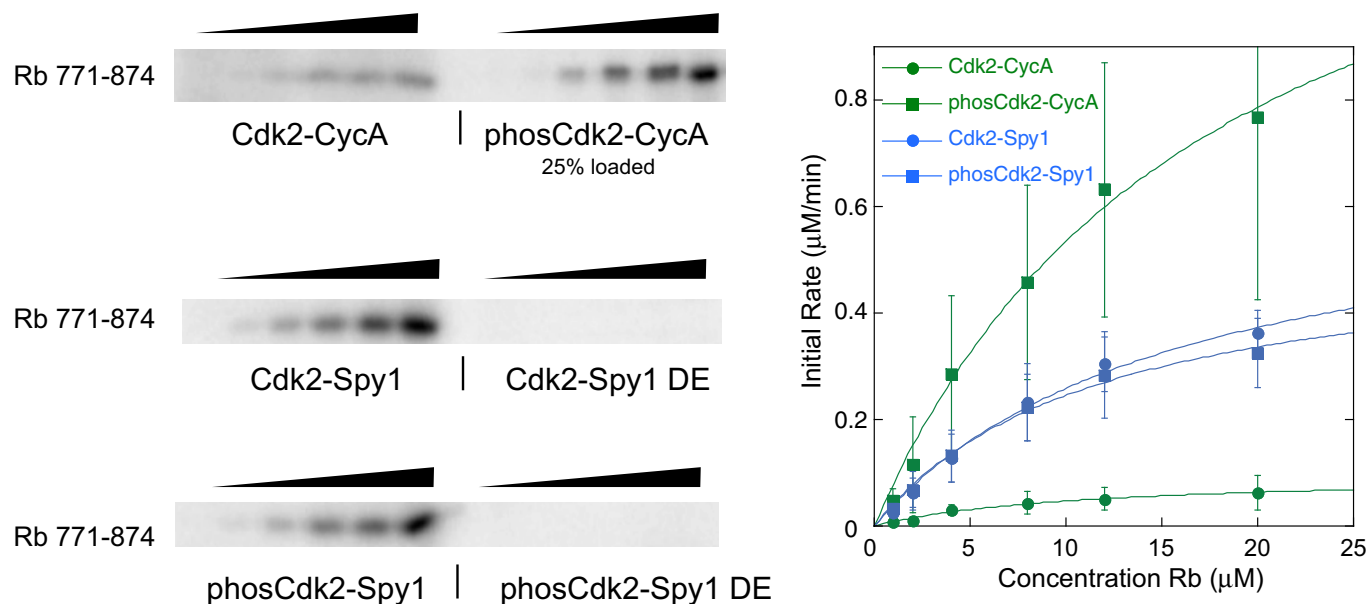


### % identity with SpyA1

Spy1C	33.4
p35	9.9
CycB	7.4
CycD	11.4
CycH	5.6
CycA	9.9

**Figure EV1. Sequence comparison of Spy1 with other cyclin-like proteins.**

The secondary structure elements in the Spy1 cyclin box fold (CBF) and cyclin A CBF are indicated. Overall pairwise % sequence identity between each sequence and Spy1A is shown in the table. Sequences were aligned using Clustal W.



**Figure EV2. Cdk2-Spy1 kinase reactions using the retinoblastoma (Rb) protein C-terminal domain.**

Kinase assays as described in Fig 3 except using Rb<sup>771-875</sup>, which contains 7 Cdk consensus sites, as substrate. Reported values are averages from three different experiments with the standard deviations shown as error bars. The kinetic parameters (with standard deviations reported as errors) averaged over the three replicates are shown in the table.

Source data are available online for this figure.

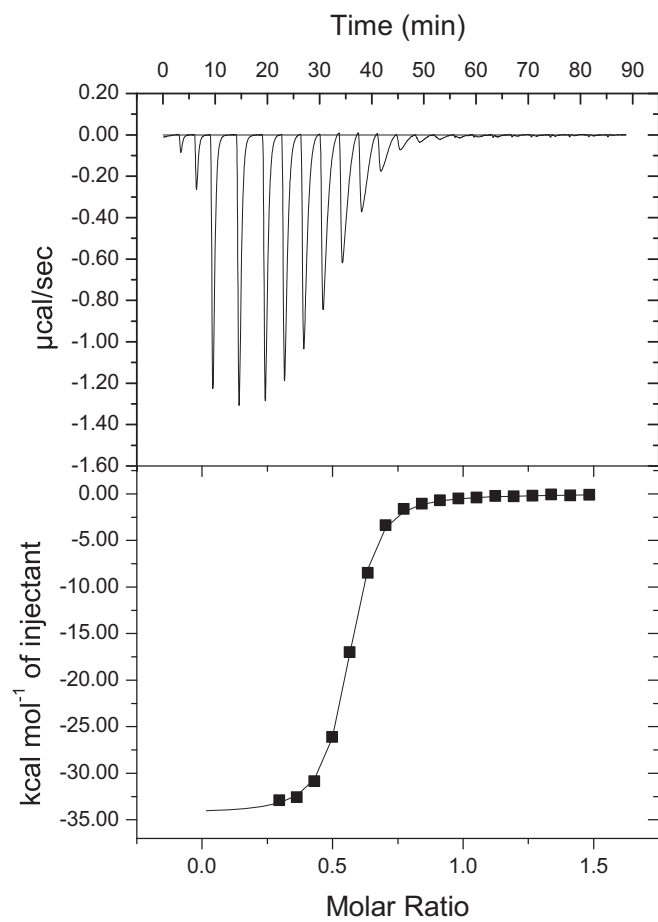


Figure EV3. Isothermal titration calorimetry assay of p27 kinase inhibitory domain (KID) binding to Cdk2-Spy1 (S/R box).

$$K_d = 180 \pm 70 \text{ nM}$$