

## Supplemental Information

### **Plk1 phosphorylates Sgt1 at the kinetochores to promote the timely kinetochore-microtubule attachment**

X. Shawn Liu<sup>1,3</sup>, Bing Song<sup>2,3</sup>, Jiabin Tang<sup>1</sup>, Weiyi Liu<sup>4</sup>, Shihuan Kuang<sup>4</sup>, and Xiaoqi Liu<sup>1,3,\*</sup>

<sup>1</sup>Department of Biochemistry, <sup>2</sup>Department of Biological Sciences, <sup>3</sup>Center for Cancer Research,

<sup>4</sup>Department of Animal Sciences, Purdue University, West Lafayette, IN 47907, U.S.

\*To whom correspondence should be addressed: Department of Biochemistry, Purdue

University, 175 S. University Street, West Lafayette, IN 47907, Tel: 765-496-3764; Fax: 765-494-

7897; E-mail: [liu8@purdue.edu](mailto:liu8@purdue.edu).

**This Supplemental Information file contains:**

- 1. Supplemental Movie Legend**
- 2. Supplemental Movies S1-S3.**

## 1. Supplemental Movie Legend

**Movie S1-S3.** HeLa cells were simultaneously transfected with murine Flag-Sgt1 constructs (WT, S302A, or S302E) and Sgt1 siRNA for 48 hours. Then cells were treated with Hoechst 33342, and subjected to analysis with time-lapse video microscopy to follow mitotic progression. During filming, cells were maintained in HEPES-buffered DMEM and at 37°C. After treatment with Hoechst 33342, cells were tracked for 5 h and images were acquired at 7-min intervals with Nikon software. Movie **S1**, **S2**, and **S3** represent the mitotic progression of cells expressing Flag-Sgt1-WT, Flag-Sgt1-S302A, and Flag-Sgt1-S302E respectively.