

**Table S1. Activity of SnRK1-KD expressed in *N. benthamiana***

| SnRK1-KD or SnRK1-KD-K49R* (ng) | Substrate | SnRK1 activity |
|---------------------------------|-----------|----------------|
| 5                               | GST-SAMS  | 145122         |
| 10                              | GST-SAMS  | 261765         |
| 15                              | GST-SAMS  | 295594         |
| 20                              | GST-SAMS  | 414018         |
| 20                              | GST-SAMA  | 5377           |
| 30*                             | GST-SAMS  | 15157          |
| 30*                             | GST-SAMA  | 2931           |
| 20                              | auto      | 248345         |
| 30*                             | auto      | 11928          |

Activity values (in arbitrary units) were obtained by measuring signal intensity of <sup>32</sup>P-labeled SnRK1-KD or SnRK1-KD-K49R (autophosphorylation), or GST-SAMS or GST-SAMA, from images obtained by exposing PAGE gels to a phosphorimager (Figure 1B and 1C).