

**Supplementary Figure 1. GST does not cleave P1.** All reactions had 10 nM P1, 5'-end labeled with  $\gamma$ -<sup>32</sup>P ATP. Reactions were performed in 50 mM Tris-Cl pH 7.4, 1 mM MgCl<sub>2</sub> and 75 mM NaCl for 10 min at 37 °C in presence of 1  $\mu$ M single strand poly-dA as non-specific competitor. *Lane 1*, P1 only; *lanes 2-4*, P1 with 1, 2 or 5  $\mu$ M GST; *lane 5*, P1 with 0.5  $\mu$ M mNdK. Cleaved products were separated in a 8% native polyacrylamide gel by electrophoresis in 0.5x TBE buffer at room temperature. Gels were vacuum dried autoradiography was done using Phosphorimager.