



Figure S1. K71M Greatwall is Hyperactive in M-Phase

(a) Greatwall Expression

The concentration of Flag-mRNAs encoding WT or K71M Gwl were adjusted to give equal protein levels of Gwl after expression in injected oocytes. Then progesterone was added to the WT-Gwl injected oocyte and at GVBD, Gwl was immunoprecipitated on anti-Flag beads and the level of Gwl measured by immunoblotting.

(b) Gwl Kinase Activity

The oocytes in panel (a) were immunoprecipitated with Gwl antibody and assayed for activity against MBP as described in Materials and Methods. Upper, autoradiograph. Lower, Coomassie stain of MBP.

(c) Quantification of K71M Gwl Activity

An experiment like that in panel (b) was performed for 5 min and the radiolabeled MBP bands were excised and counted in a liquid scintillation counter. Similar results were obtained in several independent experiments.