

**Figure S9: Precision-Recall curves for 2000 samples.** Simulation results showing precision-recall curves for a sample size of 2000. Results are shown for a range of total heritabilities and number of causal markers. Solid colors for pML methods indicate results using our method for assessing significance in the presence of correlated markers, while dashes indicate the significance method of Wu et al. [2009] and perm-MCP [Ayers and Cordell, 2010]. This figure is analogous to Figure 3b in the main text.

