Figure S3: The distribution of the mean squared error, $\text{MSE}$, of the MLE of the epistatic parameter under the additive, multiplicative, and minimum epistatic models as well as the corresponding null model, with mean fitnesses of single mutants $\mu_i = 0.9$ and $\mu_j = 0.6$. Parts A1-3 show the distribution of $\text{MSE}$ assuming epistatic coefficient $\epsilon_{ij} = -0.3$; B1-3 assume $\epsilon_{ij} = -0.1$; C1-3 assume $\epsilon_{ij} = 0.1$; D1-3 assume $\epsilon_{ij} = 0.3$. The red line represents the distribution of the $\hat{\epsilon}_{\text{MLE}}$ under the additive epistatic model; the blue line for $\hat{\epsilon}_{\text{MLE}}$ under the multiplicative epistatic model; the yellow line for $\hat{\epsilon}_{\text{MLE}}$ under the minimum epistatic model; the green line for $\hat{\epsilon}_{\text{MLE}}$ under the null model.
Figure S3.—The distribution of the mean squared error (MSE) of the MLE of the epistatic parameter under the additive, multiplicative, and minimum epistatic models as well as the corresponding null model (with mean fitnesses of single mutants $\mu_i = 0.9$ and $\mu_j = 0.6$). Parts A1-3 show the distribution of MSE assuming epistatic coefficient $\varepsilon_{ij} = -0.3$; B1-3 assume $\varepsilon_{ij} = -0.1$; C1-3 assume $\varepsilon_{ij} = 0.1$; D1-3 assume $\varepsilon_{ij} = 0.3$. The red line represents the distribution of the MSE $\hat{\xi}_{MLE}$ under the additive epistatic model; the blue line for $\hat{\xi}_{MLE}$ under the multiplicative epistatic model; the yellow line for $\hat{\xi}_{MLE}$ under the minimum epistatic model; the green line for $\hat{\xi}_{MLE}$ under the null model (of the simulated definition).