

**Table S23. Fraction of local heritability explained in RACI simulated phenotypes.**

A:	# Low-frequency untyped causals:				
	1	2	3	5	10
$h_{\text{GWAS}}^2$	11%	11%	10%	8%	6%
$h_{\text{GWAS},\text{joint}}^2$	39%	35%	29%	18%	28%
$h_g^2$ local (se)	68% (1.5%)	65% (2.7%)	62% (2.5%)	56% (3.2%)	44% (2.0%)
$h_{g\text{LD}}^2$ local (se)	53% (1.2%)	57% (1.1%)	54% (1.3%)	52% (1.5%)	67% (0.9%)
$h_{g\text{LD}}^2$ local increase	4.61	4.96	5.23	5.96	10.80
B:	# Common untyped causals:				
	1	2	3	5	10
$h_{\text{GWAS}}^2$	45%	38%	33%	28%	19%
$h_{\text{GWAS},\text{joint}}^2$	66%	56%	51%	47%	49%
$h_g^2$ local (se)	101% (1.1%)	107% (0.9%)	72% (1.0%)	103% (0.9%)	103% (0.8%)
$h_{g\text{LD}}^2$ local (se)	67% (1.2%)	70% (1.4%)	69% (1.3%)	68% (1.0%)	69% (1.0%)
$h_{g\text{LD}}^2$ local increase	1.50	1.83	2.05	2.39	3.62

Mean and standard error (se) reported over 30 independent trials.