





The *P*-value from stage 1 (st.1.p.value) is shown alongside the *P*-value for stage 2 (p.value) estimated without the 2,000 individuals from stage 1. The local false positive rate (q-value) was estimated from the genomic control-corrected *P*-values. *P*-values have not been corrected for multiple testing. The bottom figure shows the histogram of the *P*-values with or without the known associated loci. A mixture model with two components was fitted to the data and the distribution of the associated component is shown in the histogram. \*known locus associated with metabolic phenotypes.