Supplementary Figure 13 : Comparison of $-\log 10 p$ values obtained from multi-trait and single IDP association tests. The two figures below compare $-\log _{10} p$ values for associations identified by one method with the maximum "comparable" $-\log _{10} p$ values obtained by the other method. Left hand figure: each point corresponds to an association between an IDP group and a SNP with multi-trait $-\log _{10} p$ value $>7.5$ as detailed in supplementary table 8 . Points are colour coded according to the MAF of the lead SNP for the multi-trait association as indicated in the legend at the top of the figure. Multi-trait $-\log _{10} p$ values are plotted on the horizontal axis. The vertical axis corresponds to the maximum $-\log _{10} p$ value obtained for an association between any single IDP in that group and any SNP within a flanking region of $\pm 250 \mathrm{~Kb}$ of the lead SNP for the multi-trait association. Right hand figure: each point represents an association between a single IDP and a SNP with single IDP - $\log _{10} p$ value > 7.5 as detailed in supplementary table 5 . Where the same SNP was the lead SNP for associations with multiple IDPs in the same group, only the strongest of these associations (maximum $-\log _{10} p$ value) is plotted. Points are colour coded according to the MAF of this SNP. The vertical axis corresponds to the single IDP $-\log _{10} p$ values. For each point, the horizontal axis corresponds to the maximum $-\log _{10} p$ value obtained for an association between the group to which the IDP belongs and any SNP within a flanking region of $\pm$ 250 Kb around the lead SNP for the single IDP association.


Multi-trait model -log10 p-value


Multi-trait model max flanking -log10 pval

