Supplementary Figure 13 : Comparison of -log10 p values obtained from multi-trait and single IDP association tests. The two figures below compare -log<sub>10</sub> p values for associations identified by one method with the maximum "comparable" -log<sub>10</sub> 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<sub>10</sub> p values are plotted on the horizontal axis. The vertical axis corresponds to the maximum -log<sub>10</sub> p value obtained for an association between any single IDP in that group and any SNP within a flanking region of  $\pm$  250Kb 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<sub>10</sub> p value) is plotted. Points are colour coded according to the MAF of this SNP. The vertical axis corresponds to the single IDP -log<sub>10</sub> p values. For each point, the horizontal axis corresponds to the maximum -log<sub>10</sub> p value obtained for an association between the group to which the IDP belongs and any SNP within a flanking region of  $\pm$ 250Kb around the lead SNP for the single IDP association.

