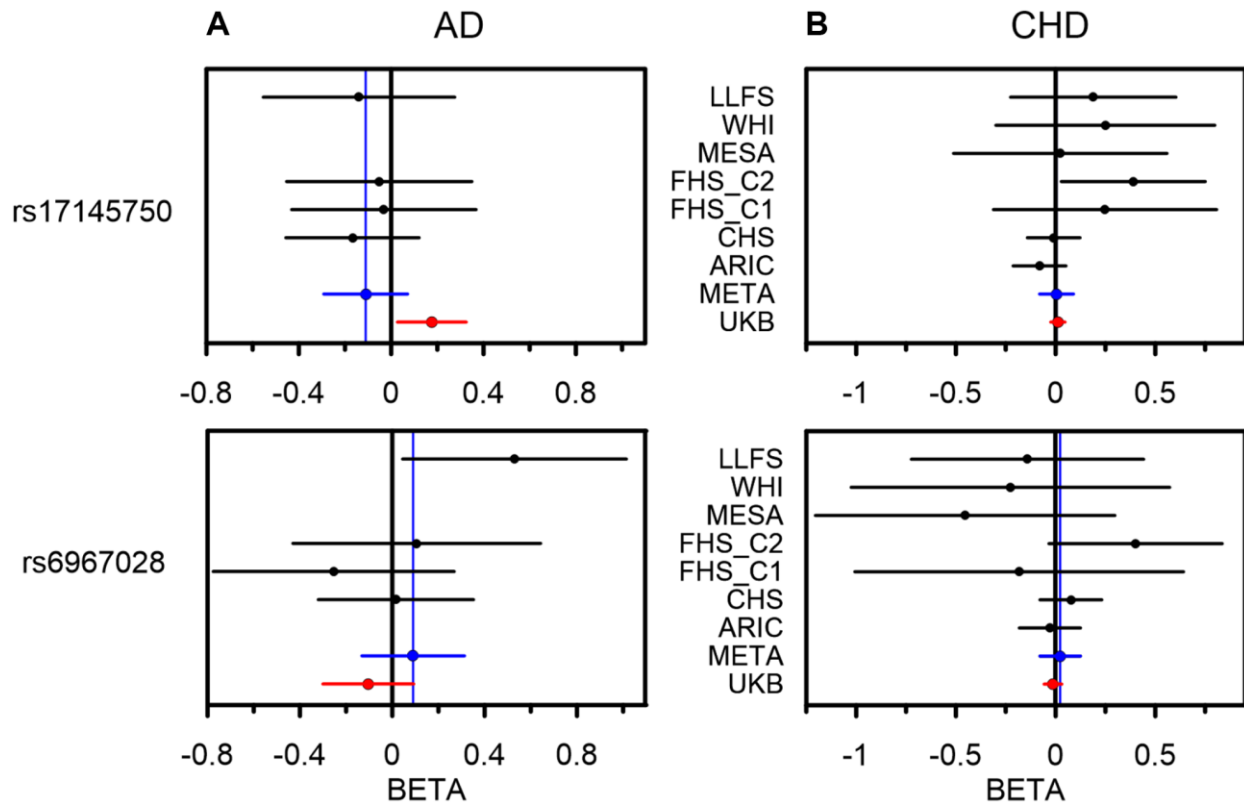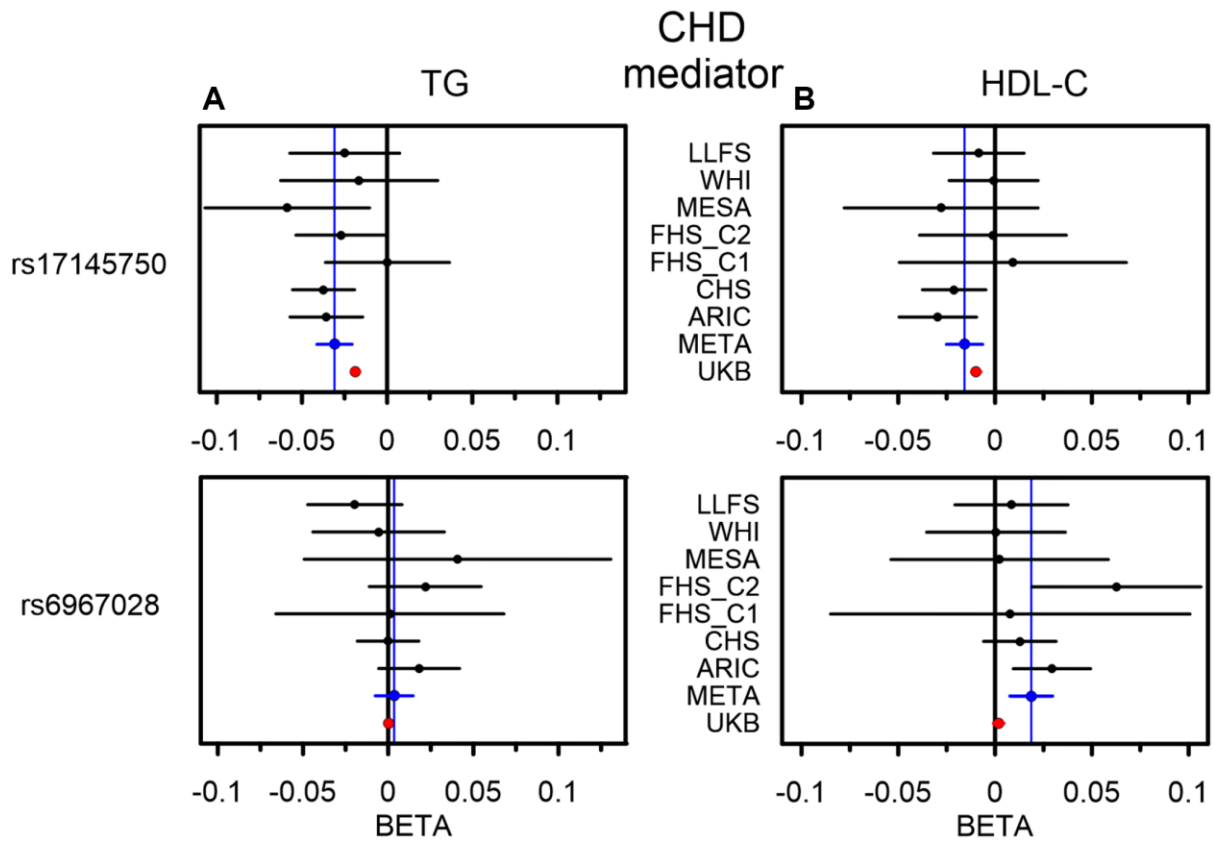Supplementary Figure 1. Associations of rs17145750 and rs6967028 from the MLXIPL gene locus with TG and HDL-C in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the associations with the outcomes: (**A**) TG and (**B**) HDL-C. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.
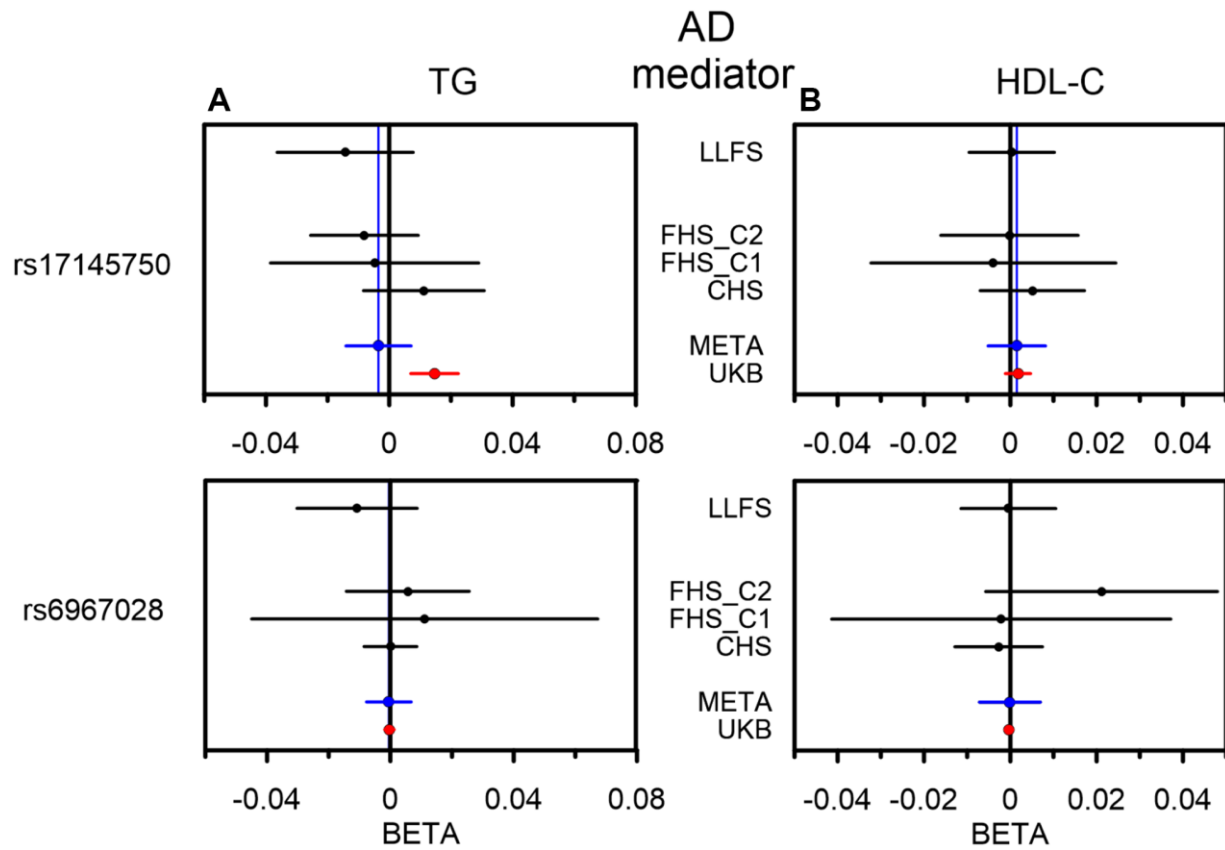
Supplementary Figure 2. Associations of rs17145750 and rs6967028 from the *MLXIPL* gene locus with AD and CHD in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the associations with the outcomes: (**A**) AD and (**B**) CHD. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.

Supplementary Figure 3. Indirect effect through TG and HDL-C in the associations of rs17145750 and rs6967028 from the *MLXIPL* gene locus with CHD in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the indirect effect (IE) through (**A**) TG and (**B**) HDL-C in the associations with CHD. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.

Supplementary Figure 4. Indirect effect through TG and HDL-C in the associations of rs17145750 and rs6967028 from the *MLXIPL* gene locus with AD in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the indirect effect (IE) through (**A**) TG and (**B**) HDL-C in the associations with AD. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.
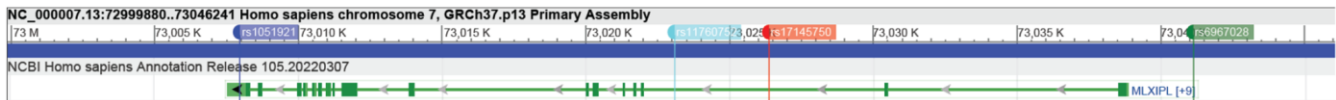
Supplementary Figure 5. Position of four selected SNPs in the *MLXIPL* gene region. (From dbSNP, NCBI).