

# Supplemental Figures

## Table of Contents

Figure S1 – Significant Locus on Chr2 .....	2
Figure S2 – Significant Locus on Chr6 .....	3
Figure S3 – Significant Locus on Chr6 .....	4
Figure S4 – Significant Locus on Chr6 .....	5
Figure S5 – Significant Locus on Chr6 .....	6
Figure S6 – Significant Locus on Chr6 .....	7
Figure S7 – Significant Locus on Chr6 .....	8
Figure S8 – Significant Locus on Chr6 .....	9
Figure S9 – Significant Locus on Chr6 .....	10
Figure S10 – Significant Locus on Chr6 .....	11
Figure S11 – Significant Locus on Chr7.....	12
Figure S12 – Significant Locus on Chr14 .....	13
Figure S13 – Significant Locus on Chr16 .....	14
Figure S14 – Enriched gene sets for overlapping genes.....	15
Figure S15 – QQ plot for neuroticism .....	16
Figure S16 – Gene-QQ plot for neuroticism .....	16
Figure S17 – QQ plot for WBC .....	17
Figure S18 – Gene-QQ plot for WBC.....	17
Figure S19 – Gene functions for neuroticism .....	18
Figure S20 – Gene function for WBC.....	18
Figure S21 – Gene expression per tissue type.....	19

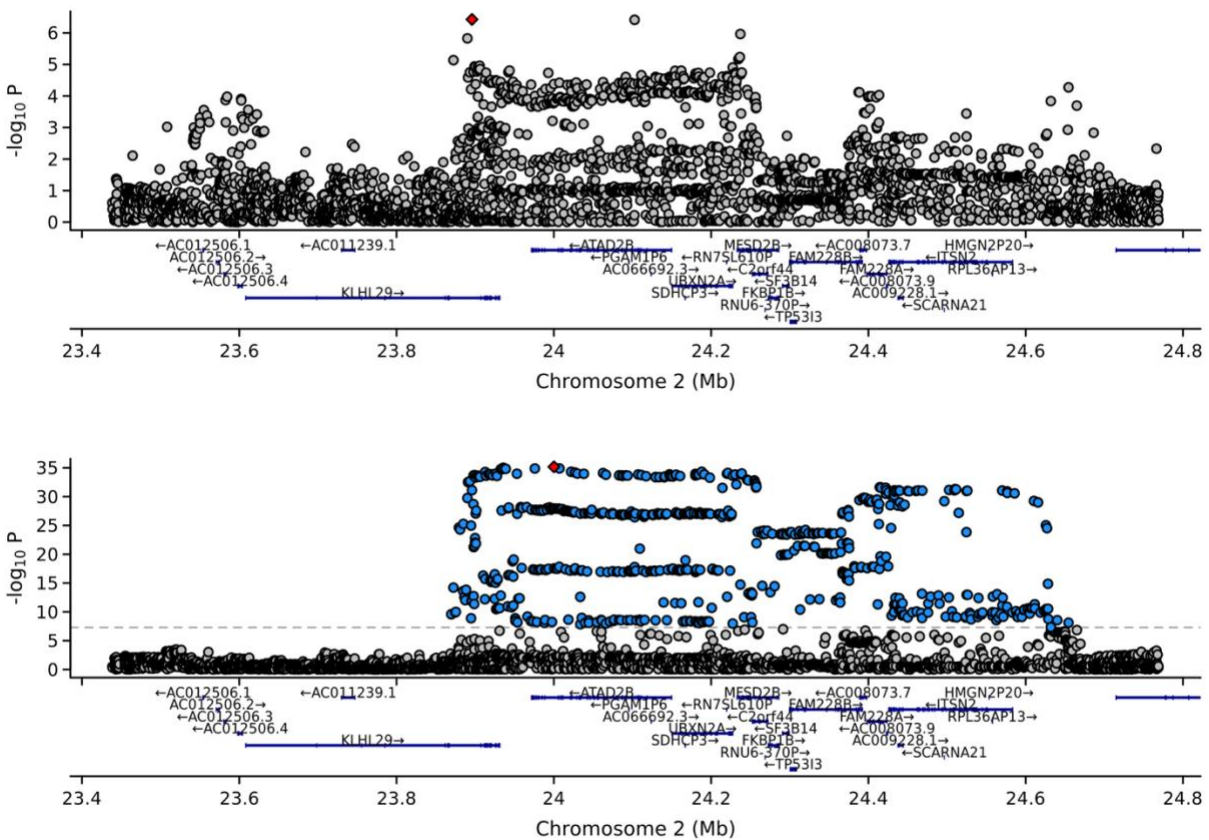


Figure S1 – Significant Locus on Chr2

Locus 227 on chromosome 2, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

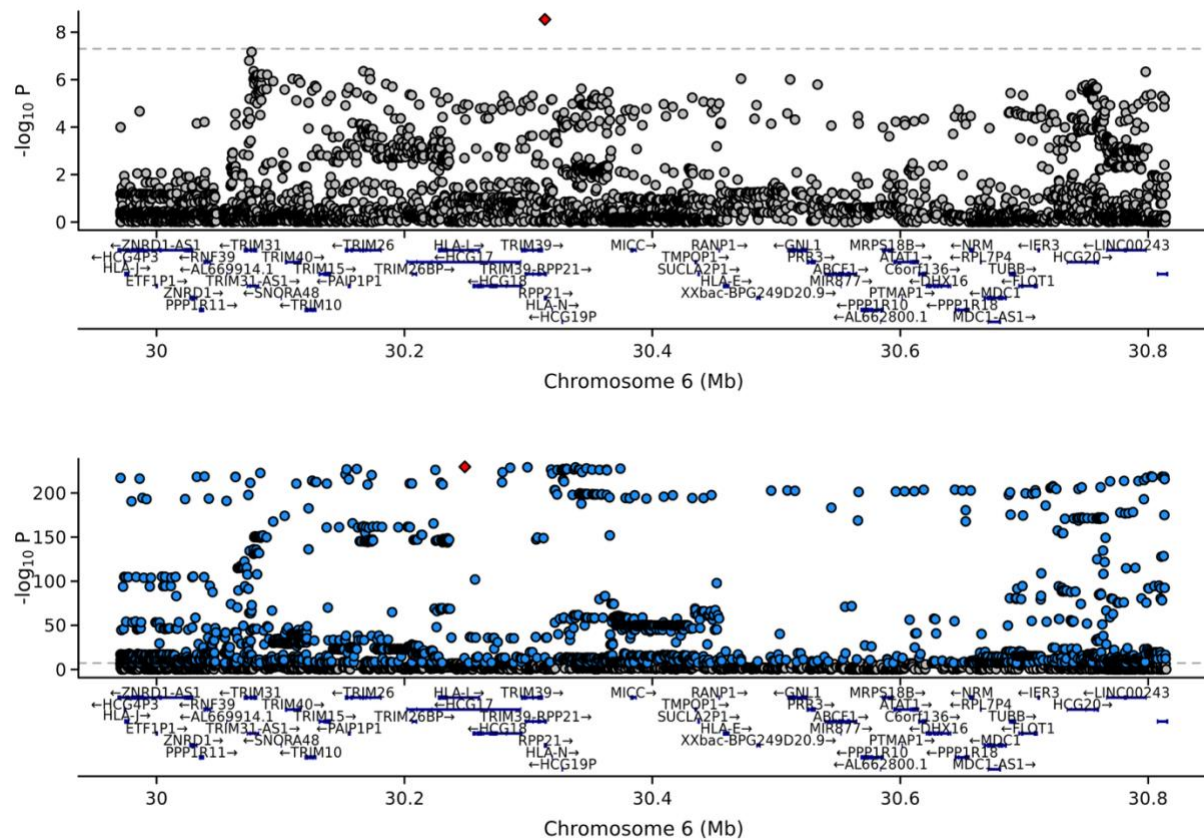


Figure S2 – Significant Locus on Chr6

Locus 956 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

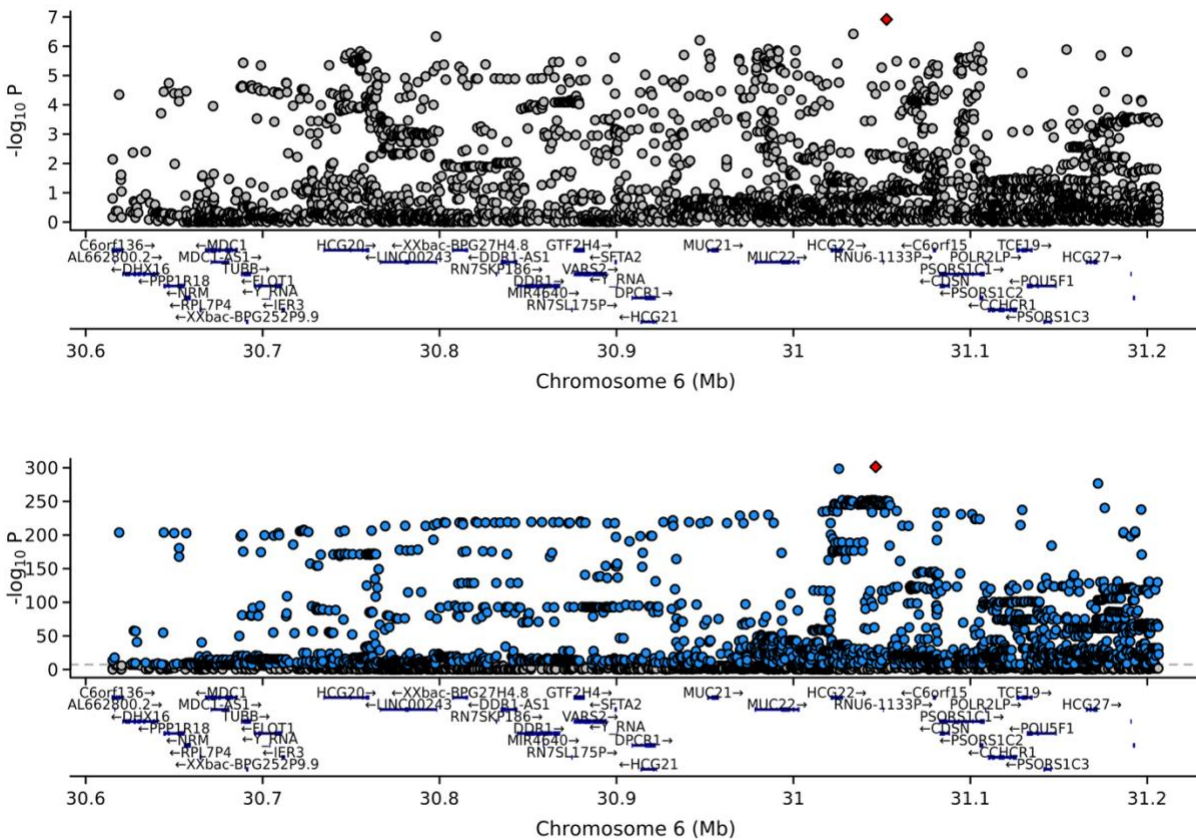


Figure S3 – Significant Locus on Chr6

Locus 957 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

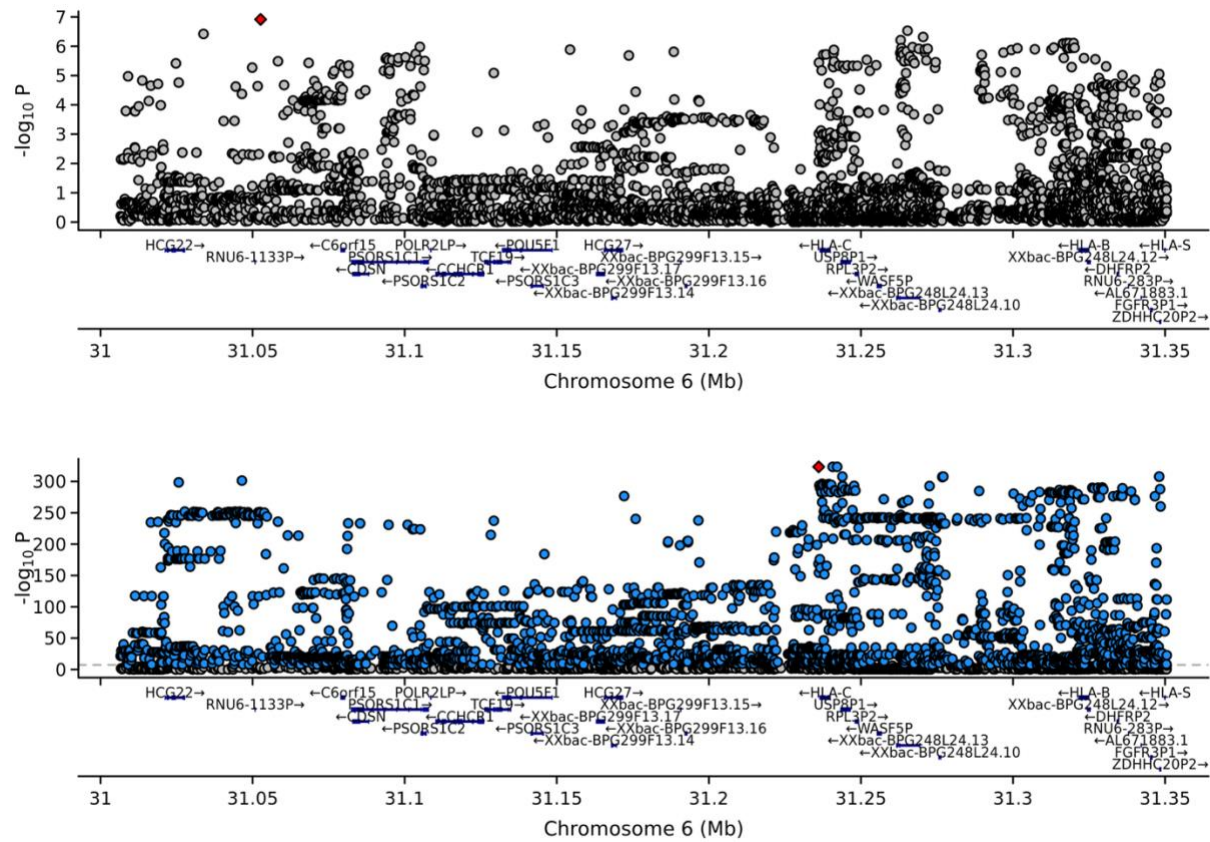
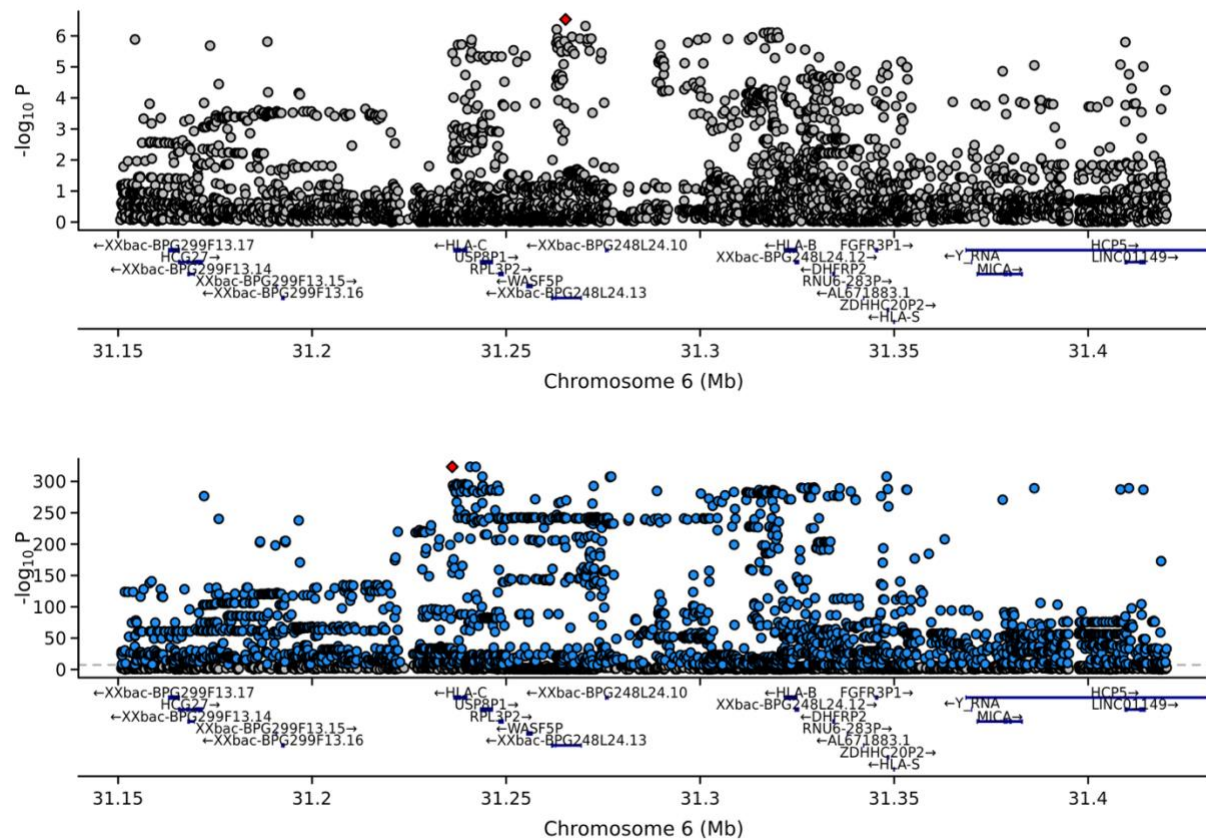


Figure S4 – Significant Locus on Chr6

Locus 958 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).





**Figure S5 – Significant Locus on Chr6**

Locus 959 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

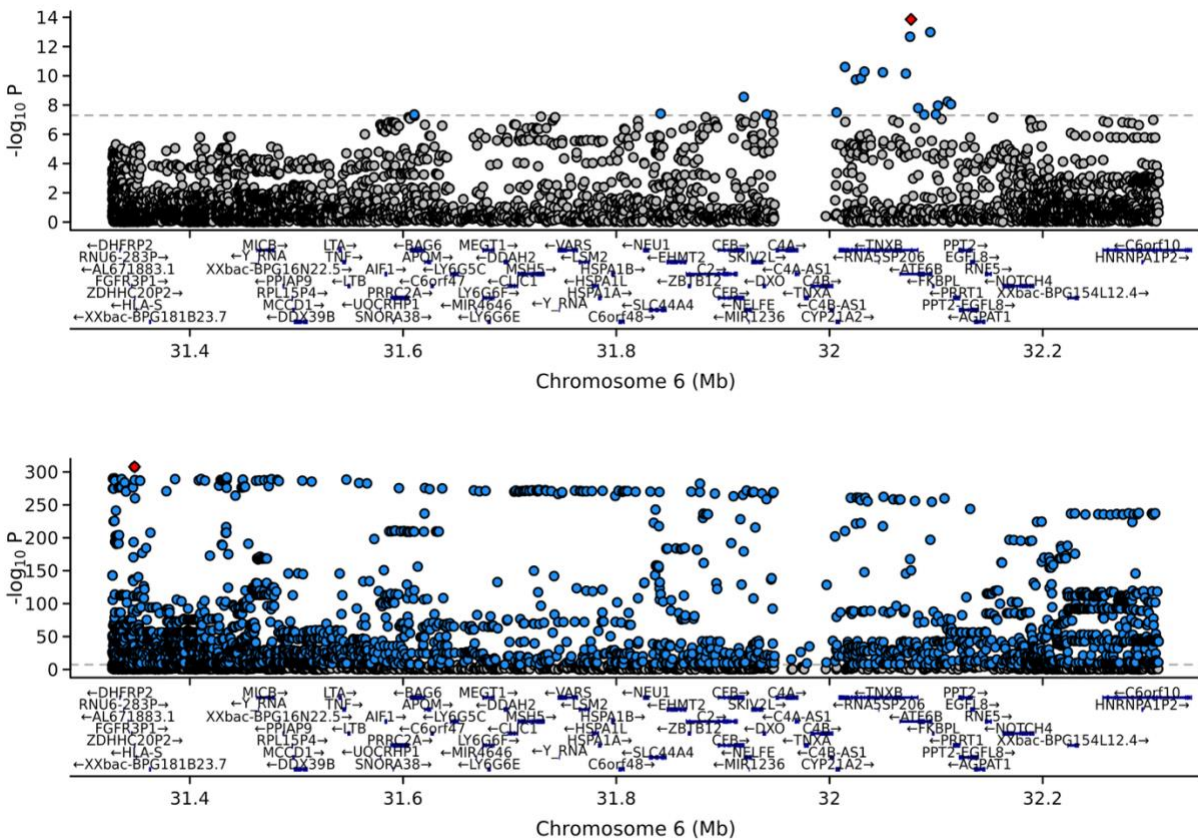


Figure S6 – Significant Locus on Chr6

Locus 961 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

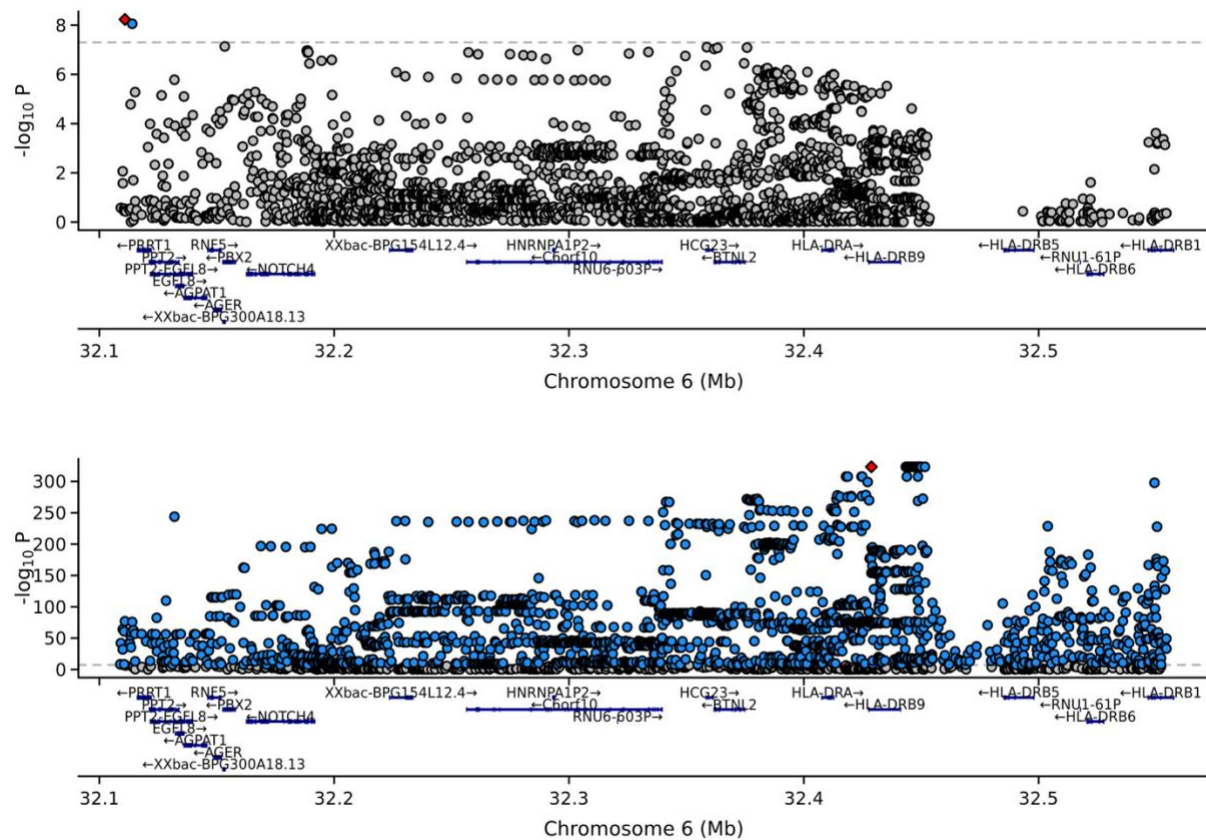


Figure S7 – Significant Locus on Chr6

Locus 962 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).



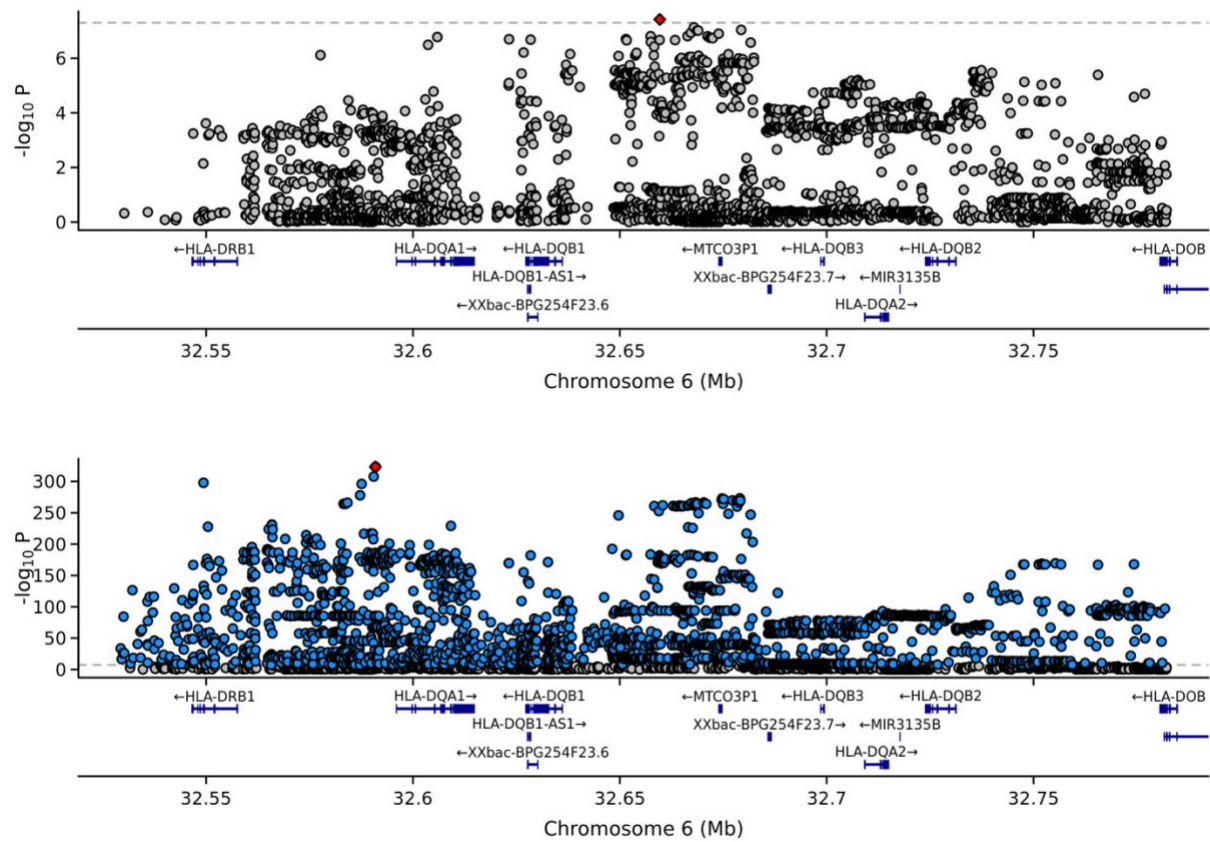


Figure S8 – Significant Locus on Chr6

Locus 966 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

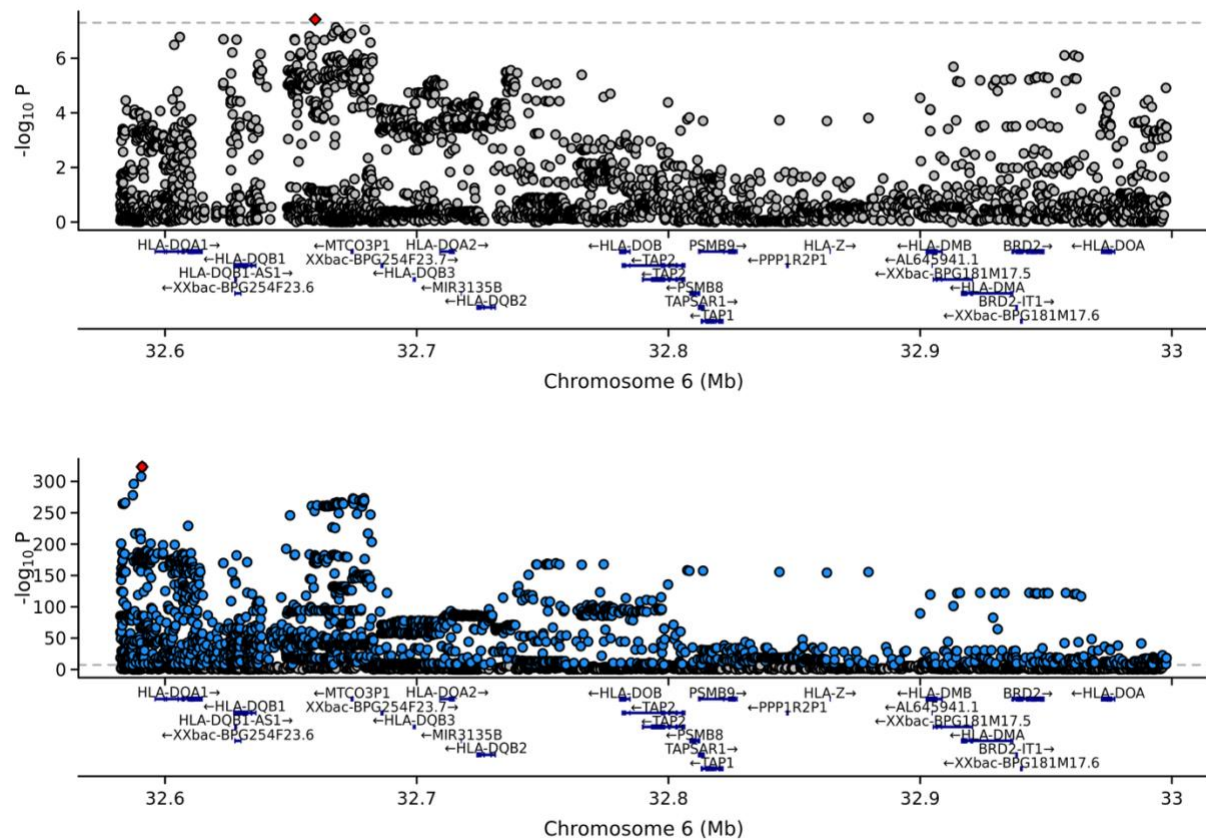


Figure S9 – Significant Locus on Chr6

Locus 967 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

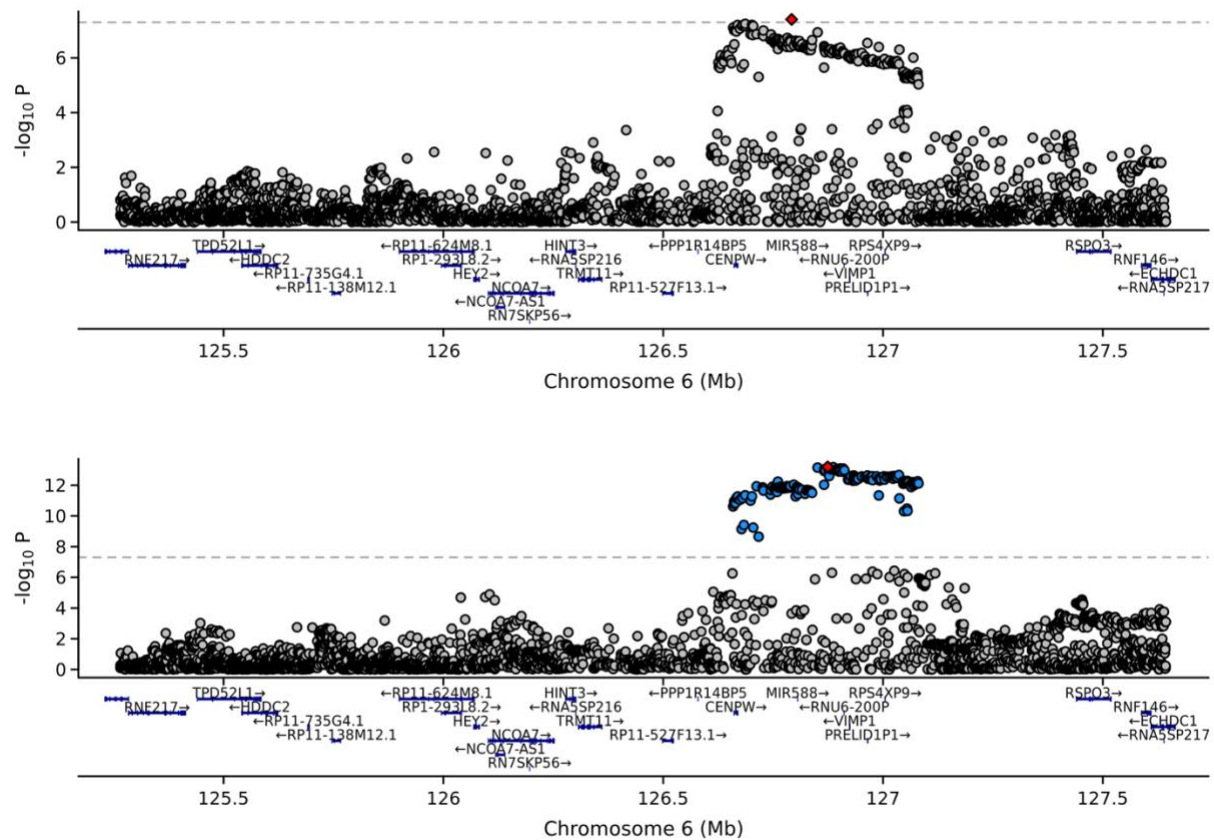


Figure S10 – Significant Locus on Chr6

Locus 1054 on chromosome 6, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

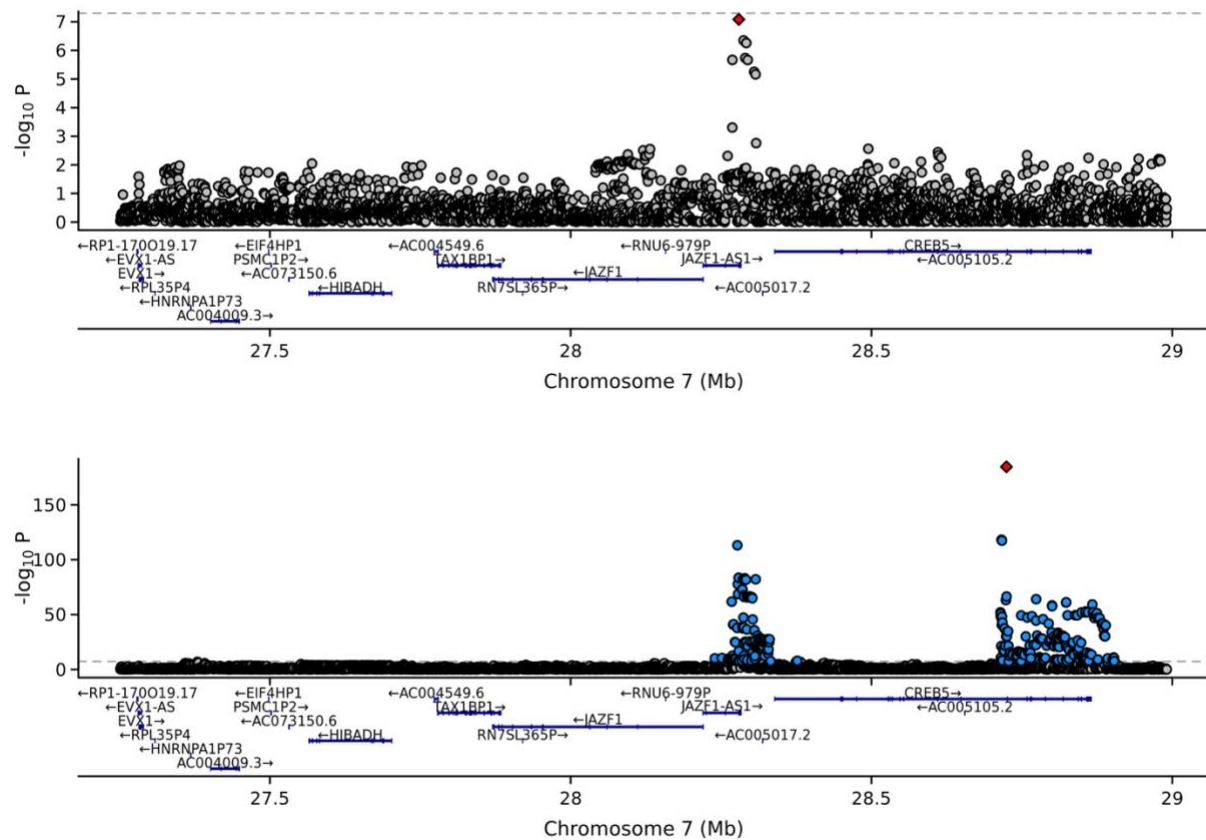
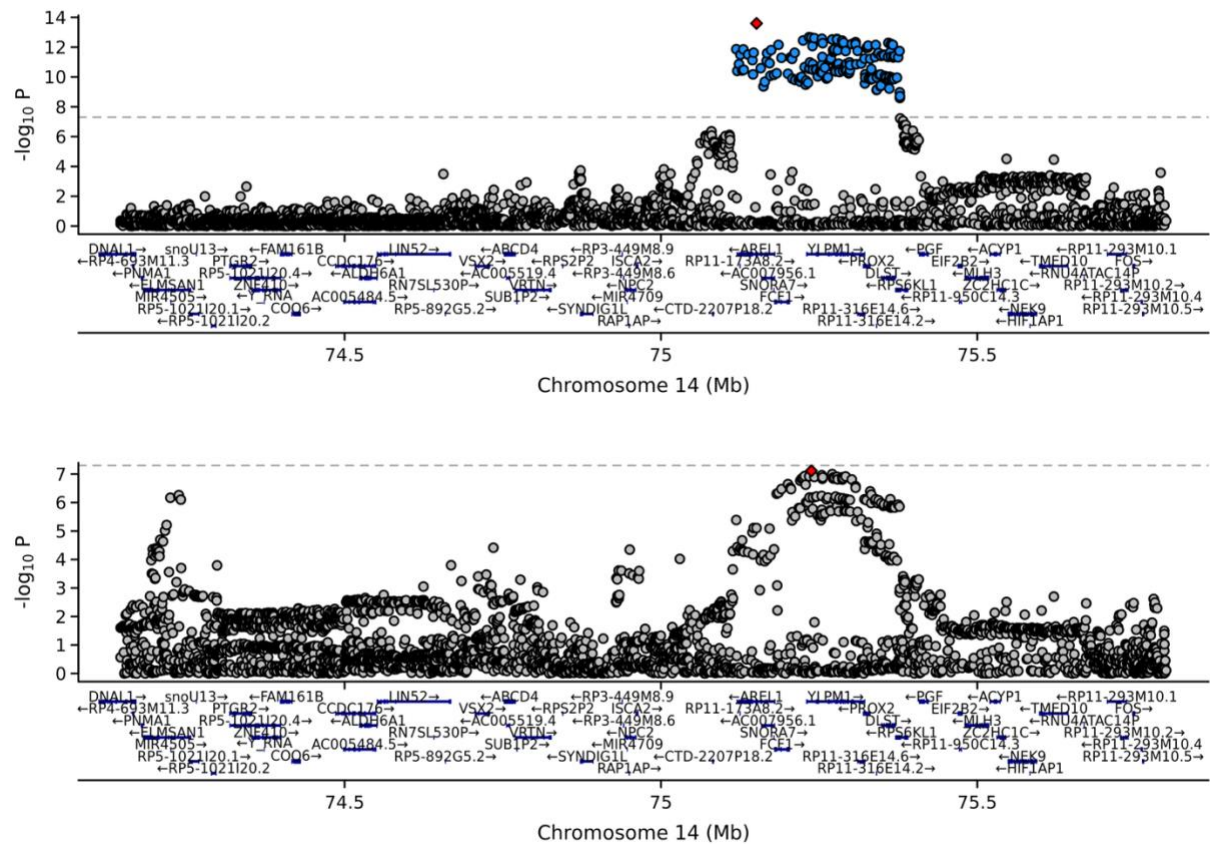


Figure S11 – Significant Locus on Chr7

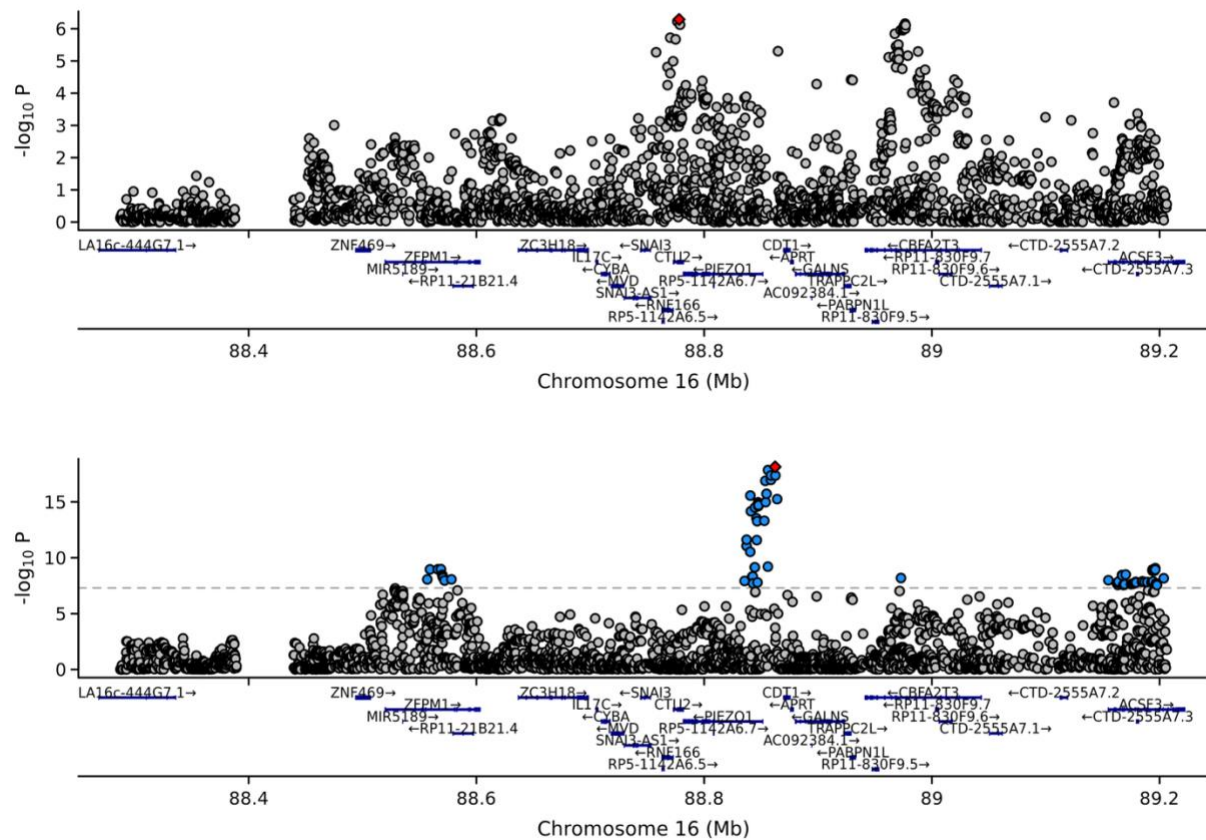
Locus 1126 on chromosome 7, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).





**Figure S12 – Significant Locus on Chr14**

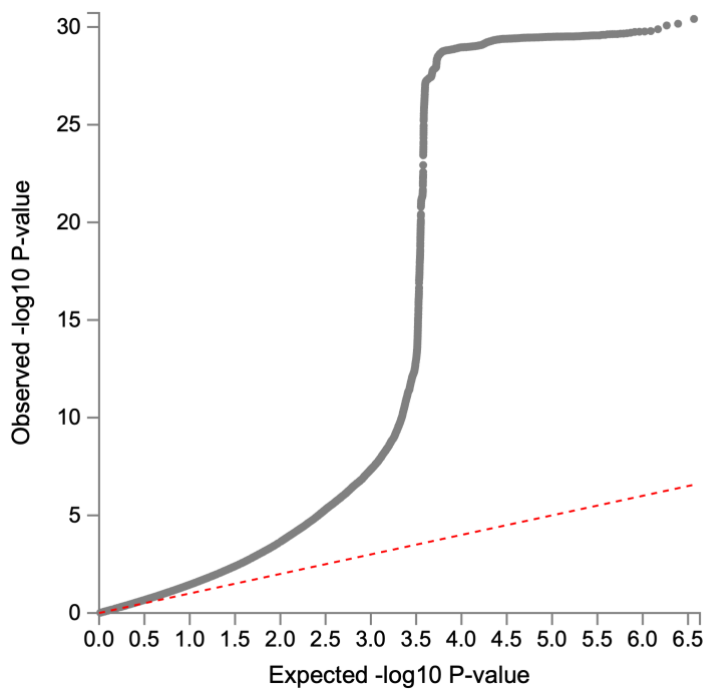
Locus 2004 on chromosome 14, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).



**Figure S13 – Significant Locus on Chr16**

Locus 2171 on chromosome 16, showing SNPs for neuroticism (upper) and WBC (lower). Significant SNPs are shown as blue dots; lead SNPs are shown as red diamonds. The dashed line indicates the threshold for significance (Bonferroni-corrected  $-\log_{10} p < 0.05$ ; correction was done for 511 tests).

[illegible]

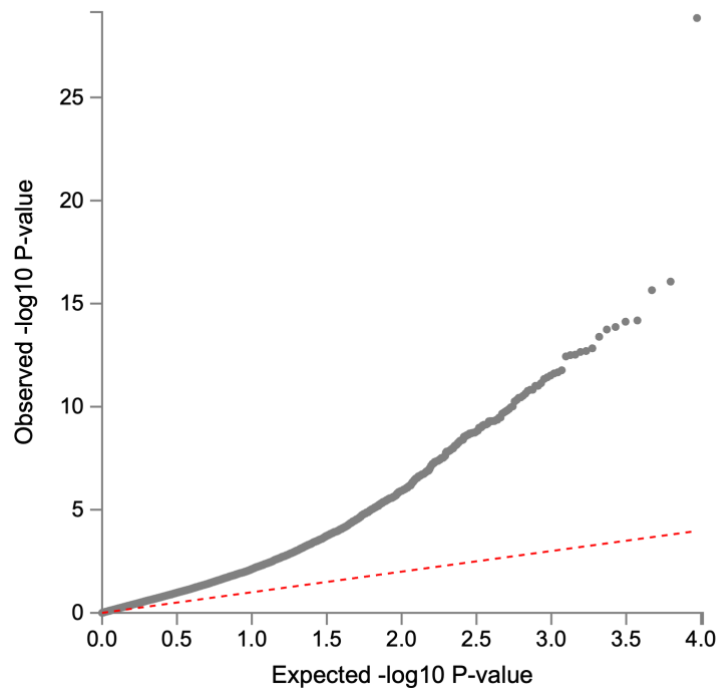


**Figure S15 – QQ plot for neuroticism**

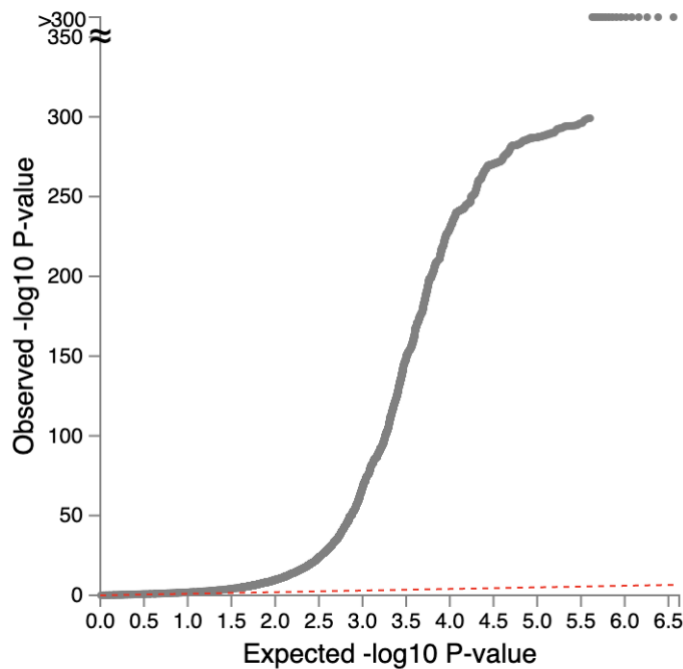
QQ plot for neuroticism, based on SNPs. The x-axis shows the expected log-transformed  $p$ -values, and the y-axis the observed log-transformed  $p$ -values. The red dashed line shows the expected  $p$ -values for the SNPs, and the grey line shows the observed  $p$ -values for the SNPs.

**Figure S16 – Gene-QQ plot for neuroticism**

QQ plot for neuroticism, based on genes. The x-axis shows the expected log-transformed  $p$ -values, and the y-axis the observed log-transformed  $p$ -values. The red dashed line shows the expected  $p$ -values for the genes, and the grey line shows the observed  $p$ -values for the genes.





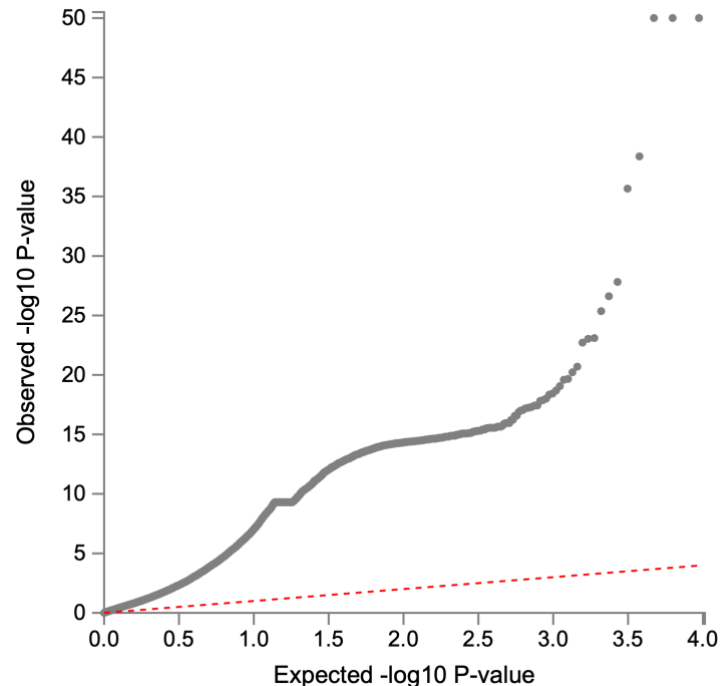


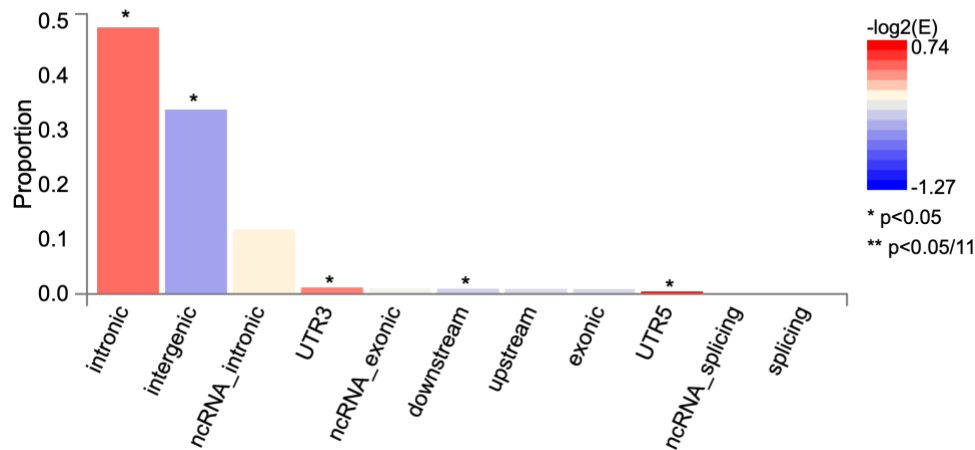
### Figure S17 – QQ plot for WBC

QQ plot for WBC, based on SNPs. The x-axis shows the expected log-transformed  $p$ -values, and the y-axis the observed log-transformed  $p$ -values. The red dashed line shows the expected  $p$ -values for the SNPs, and the grey line shows the observed  $p$ -values for the SNPs.

### Figure S18 – Gene-QQ plot for WBC

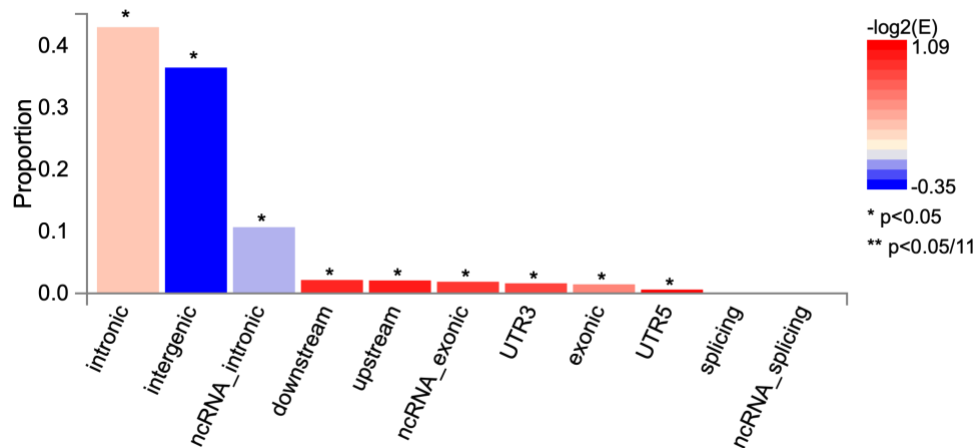
QQ plot for WBC, based on genes. The x-axis shows the expected log-transformed  $p$ -values, and the y-axis the observed log-transformed  $p$ -values. The red dashed line shows the expected  $p$ -values for the genes, and the grey line shows the observed  $p$ -values for the genes.





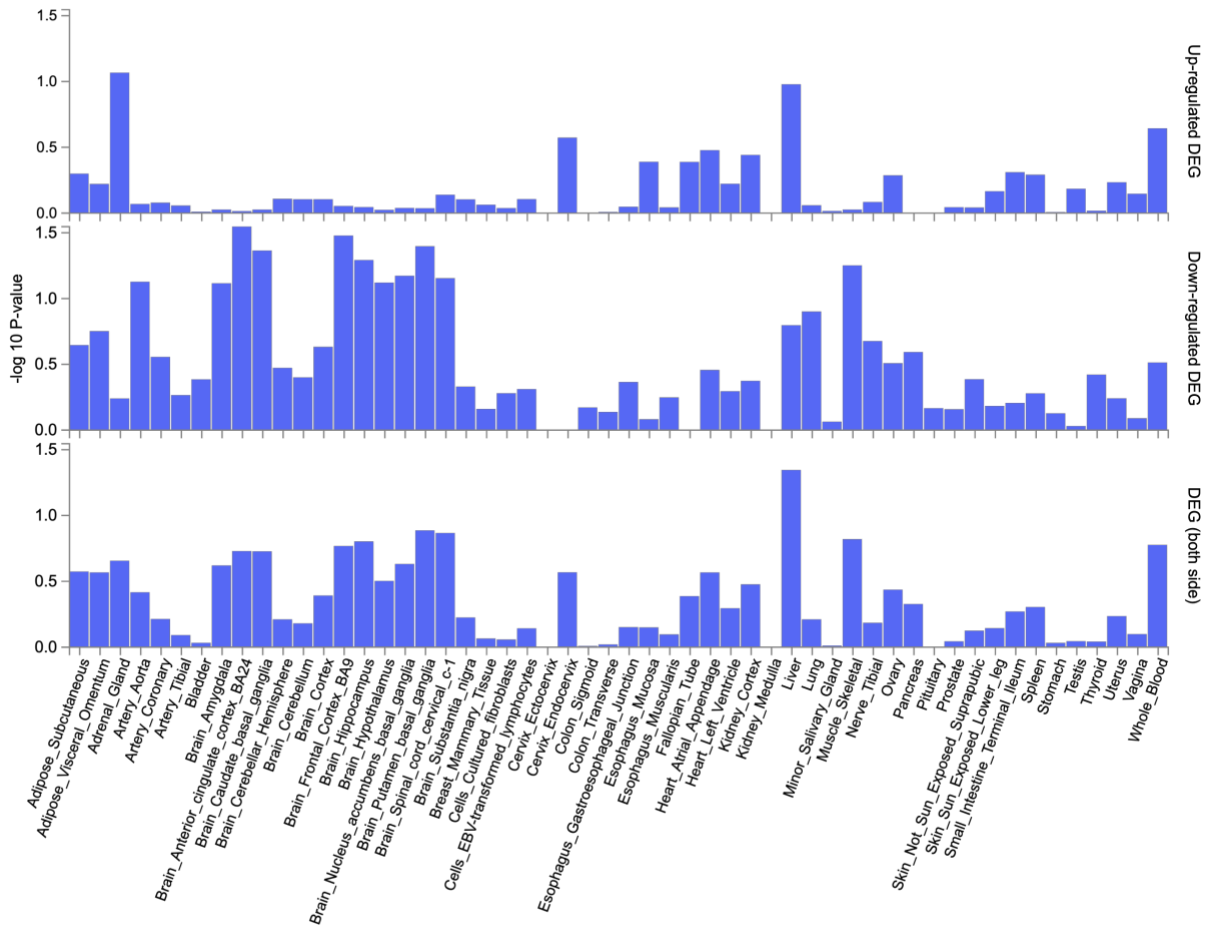
**Figure S19 – Gene functions for neuroticism**

Function of genes involved in neuroticism. The stars indicate the p-value.



**Figure S20 – Gene function for WBC**

Function of genes involved in WBC. The stars indicate the p-value.



**Figure S21 – Gene expression per tissue type**

Gene expression per tissue type for the overlapping genes between neuroticism and WBC; tissues are ordered alphabetically. The blue bars indicate that there are no significant associations between gene expression and tissue type for overlapping genes for neuroticism and WBC.