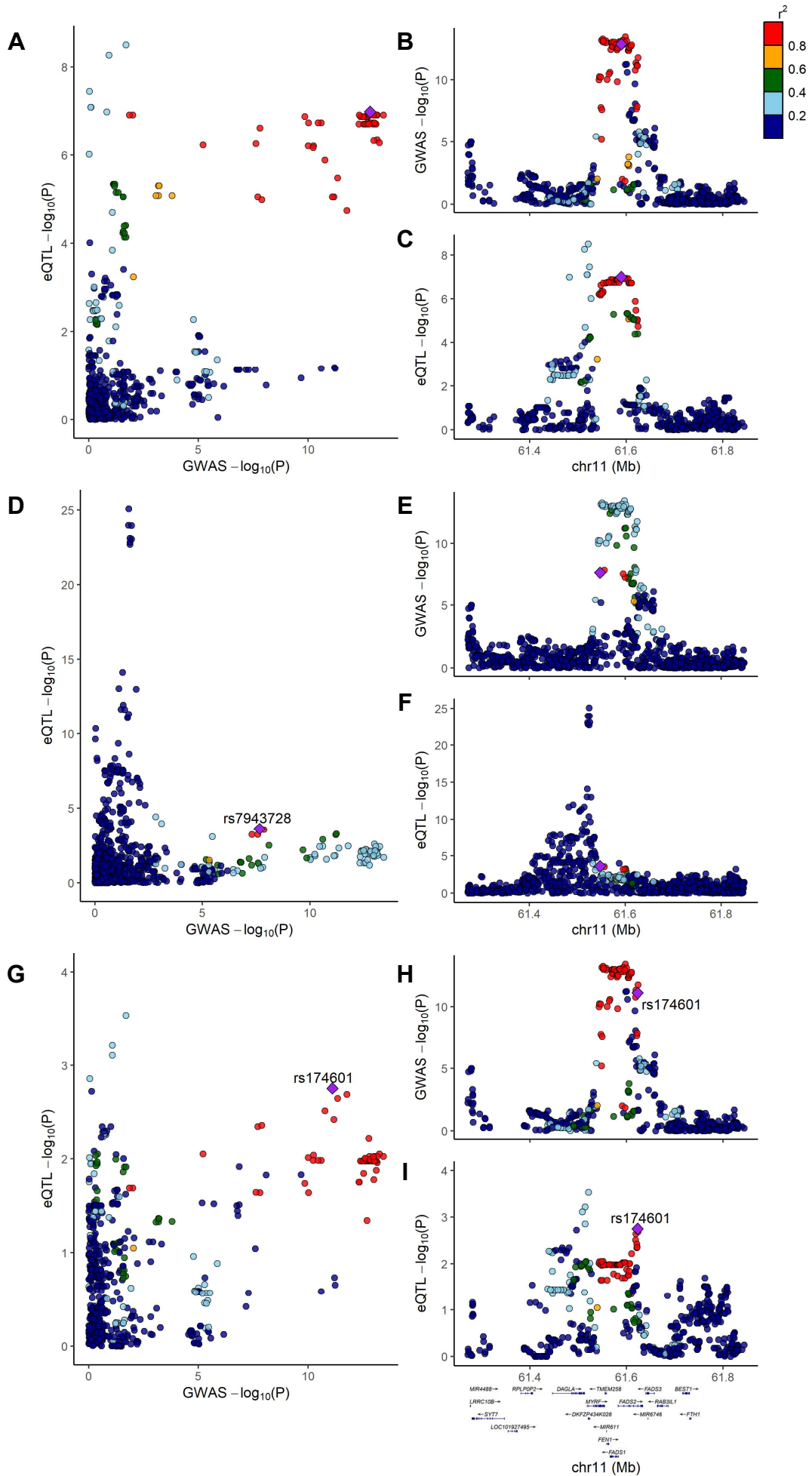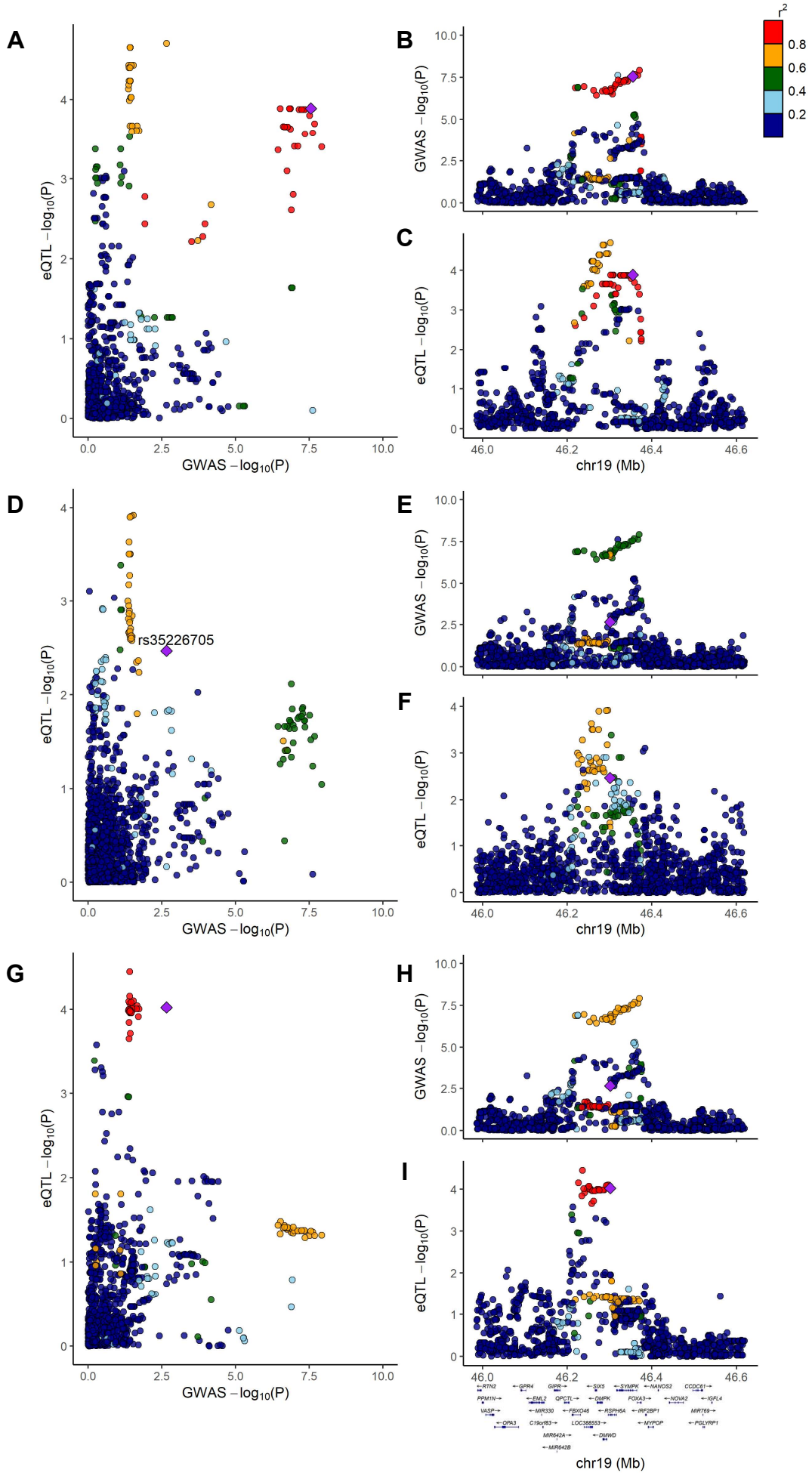# MYRF

Fig. S1. *MYRF* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.
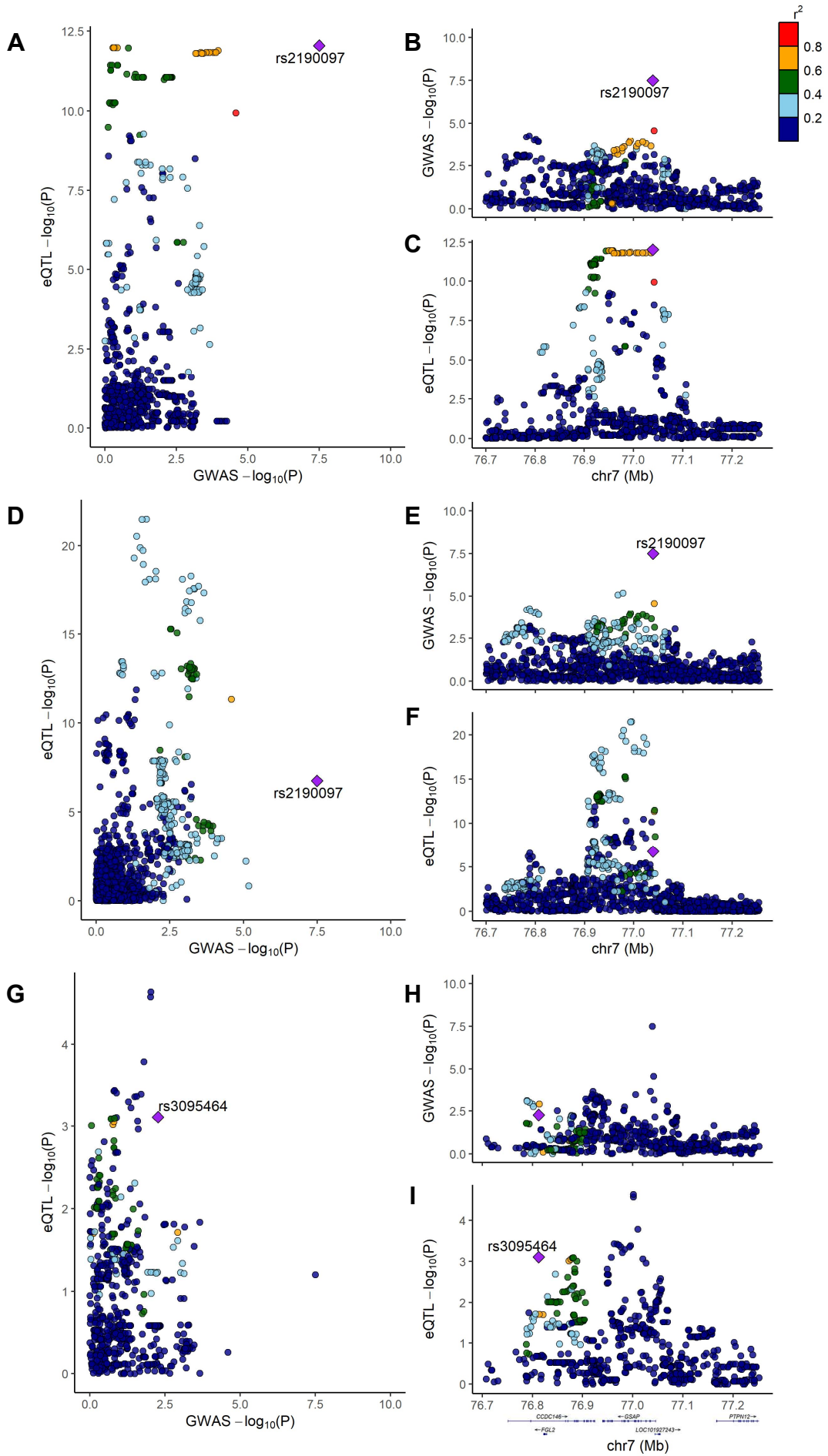
DMWD

Fig. S2. *DMWD* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.
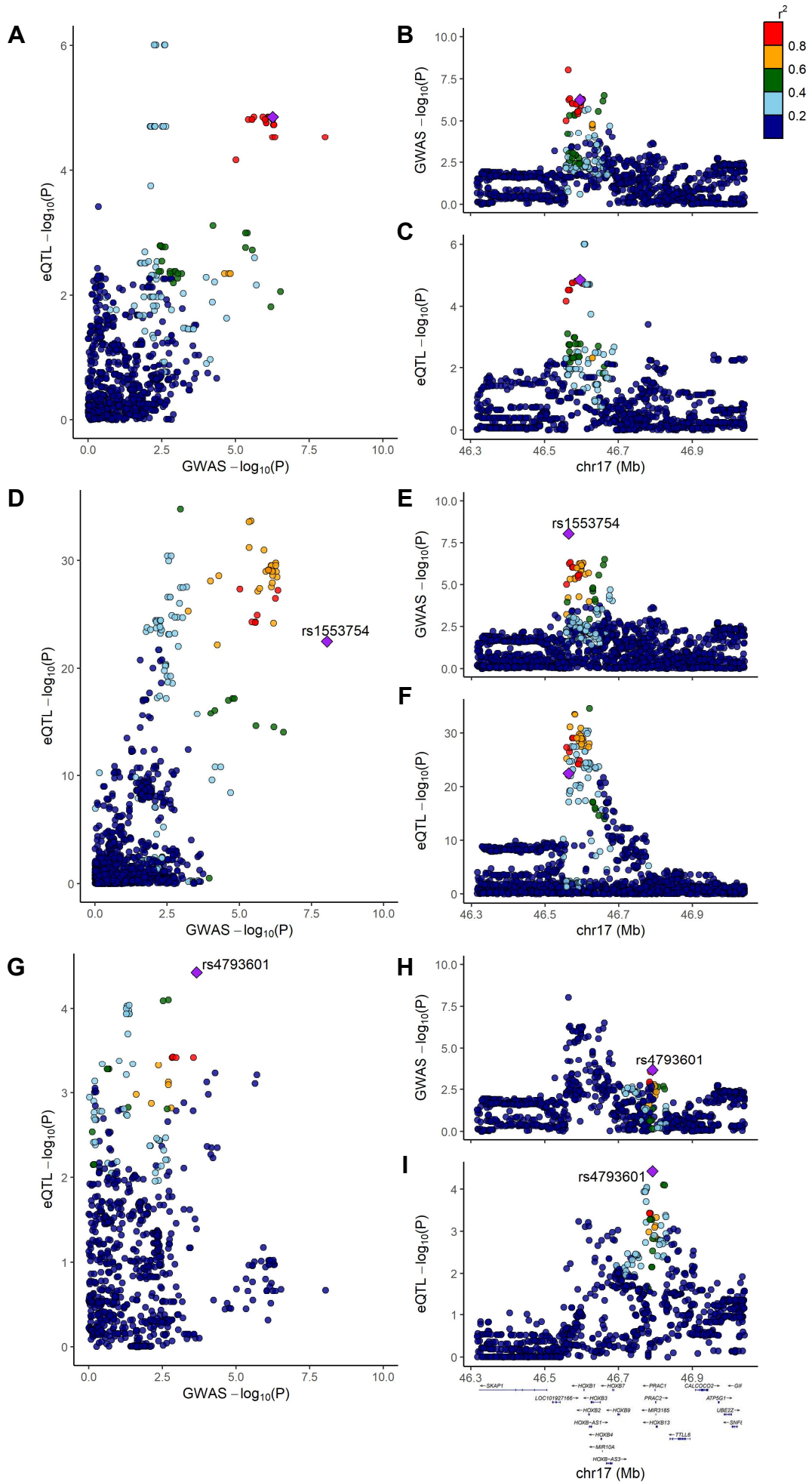
GSAP

Fig. S3. *GSAP* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.
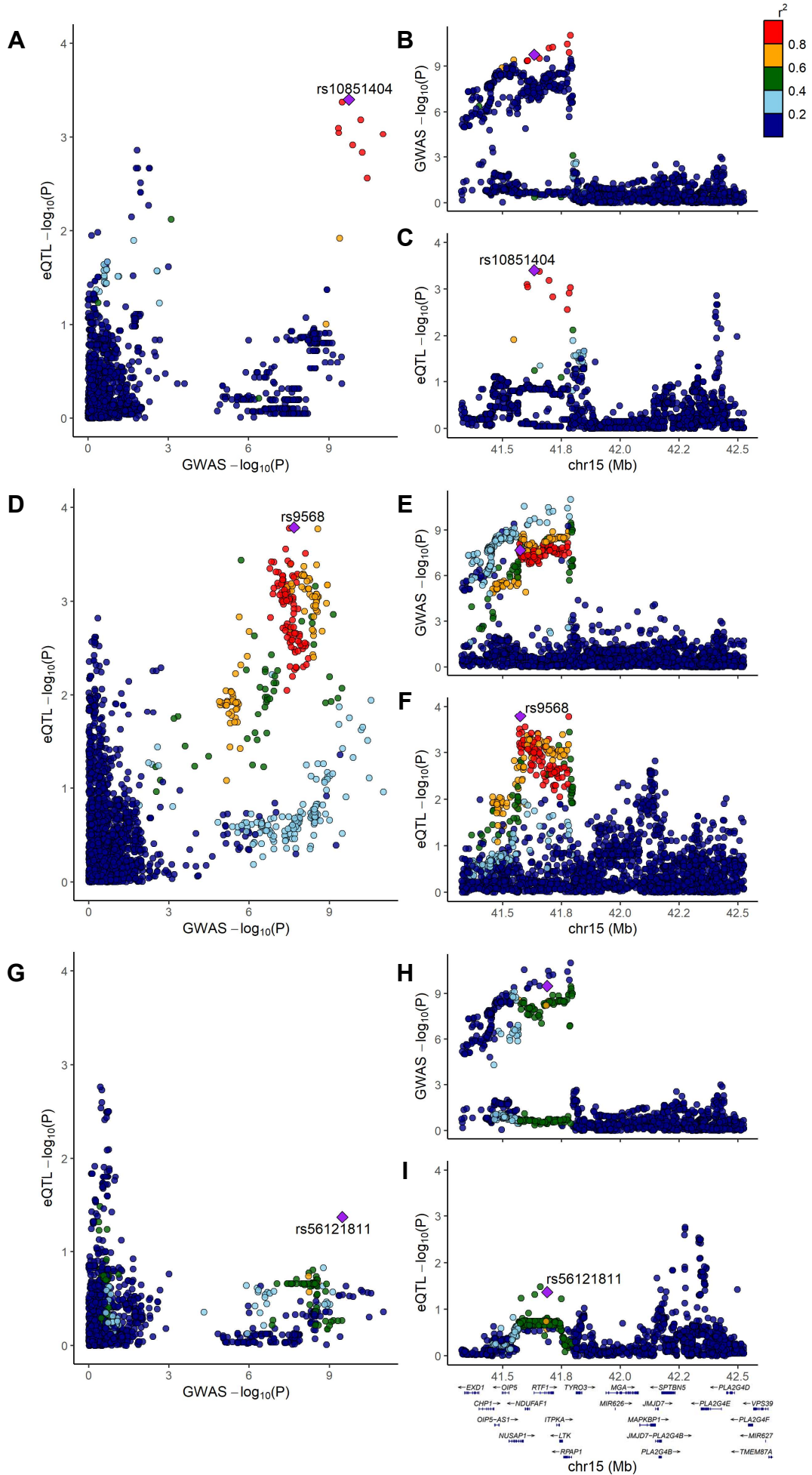
HOXB2

Fig. S4. *HOXB2* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.
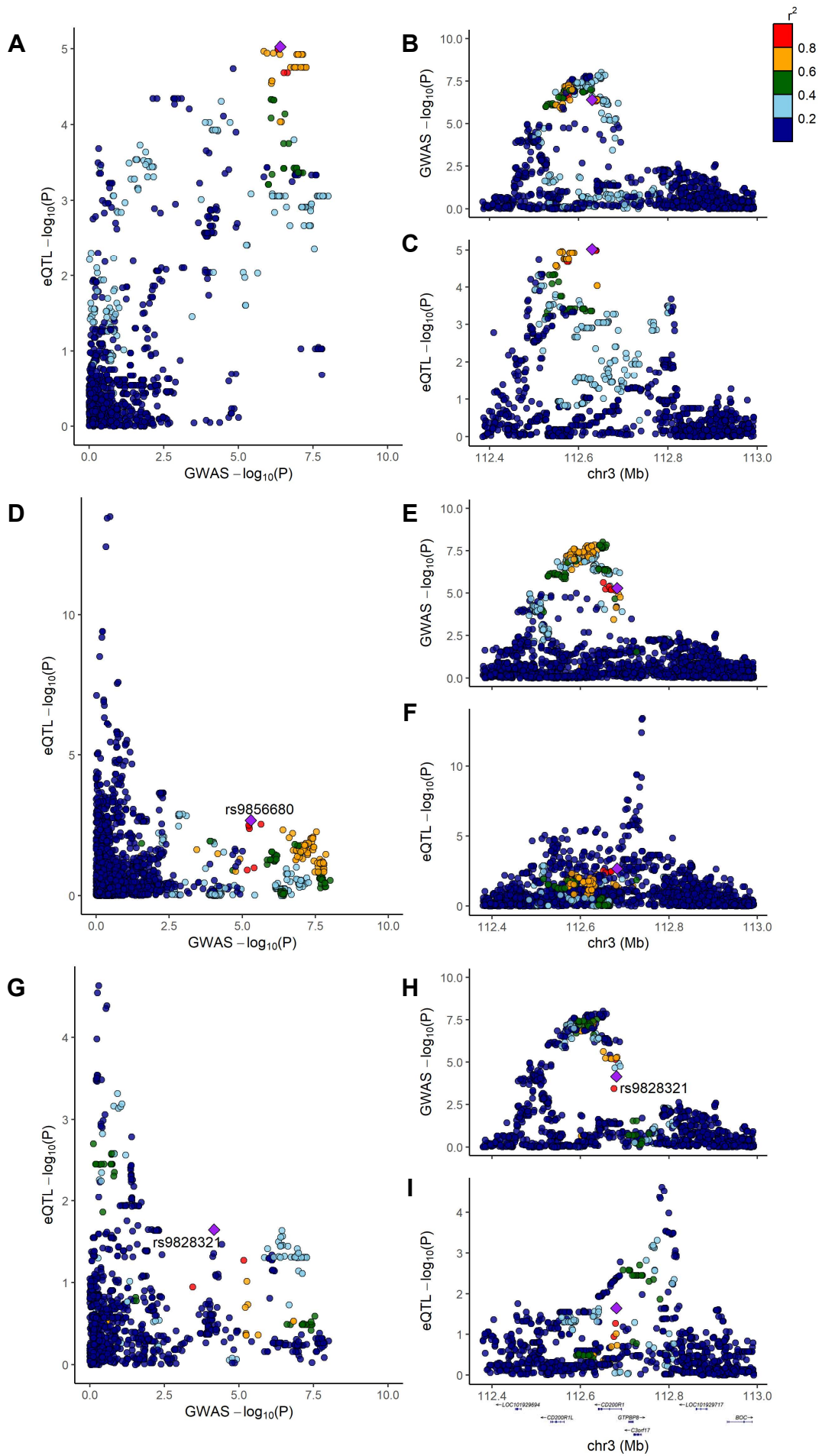
OIP5

Fig. S5. *OIP5* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.
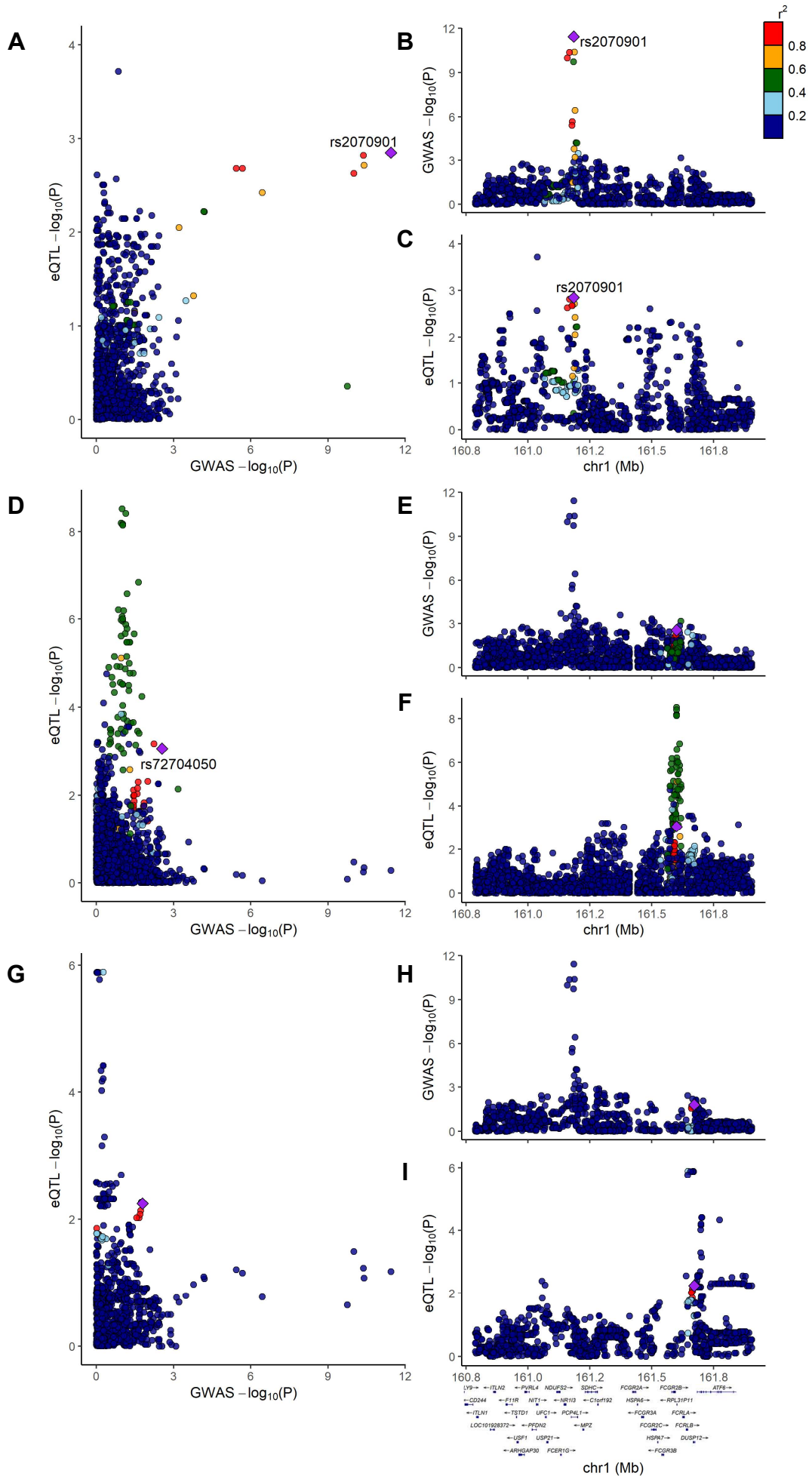
NEPRO

Fig. S6. *NEPRO* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.
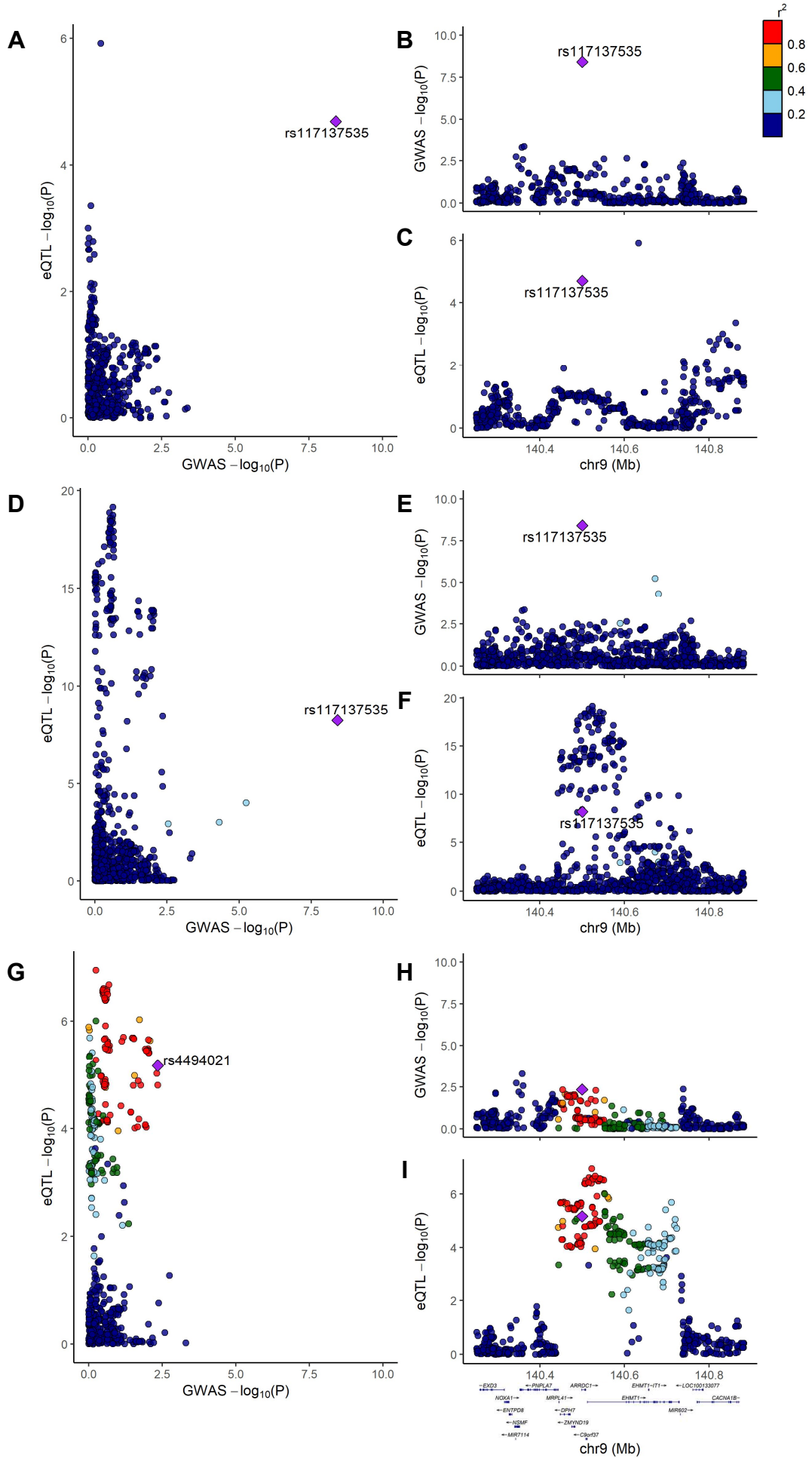
FCGR3A

Fig. S7. *FCGR3A* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P$-value). **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P$-value).

ARRDC1

Fig. S8. *ARRDC1* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.

AC124944.3

Fig. S9. *AC124944.3* colocalization across the three eQTL data resources.

A-C. Results of colocalization analysis using Korean asthmatic eQTL. **D-F.** Results of colocalization analysis using GTEx eQTL. **G-I.** Results of colocalization analysis using Japanese eQTL. **A, D, G** These panels present scatter plots to visualize the colocalization events, with eQTL *P*-values (y-axis) and GWAS *P*-values (x-axis). A bona fide signal should be present toward the top-right corner. **B, E, H** These panels present regional plots for GWAS *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$. **C, F, I** These panels present regional plots for eQTL *P*-values. The x-axis represents chromosomal base-pair position, and the y-axis represents $-\log_{10}(P\text{-value})$.