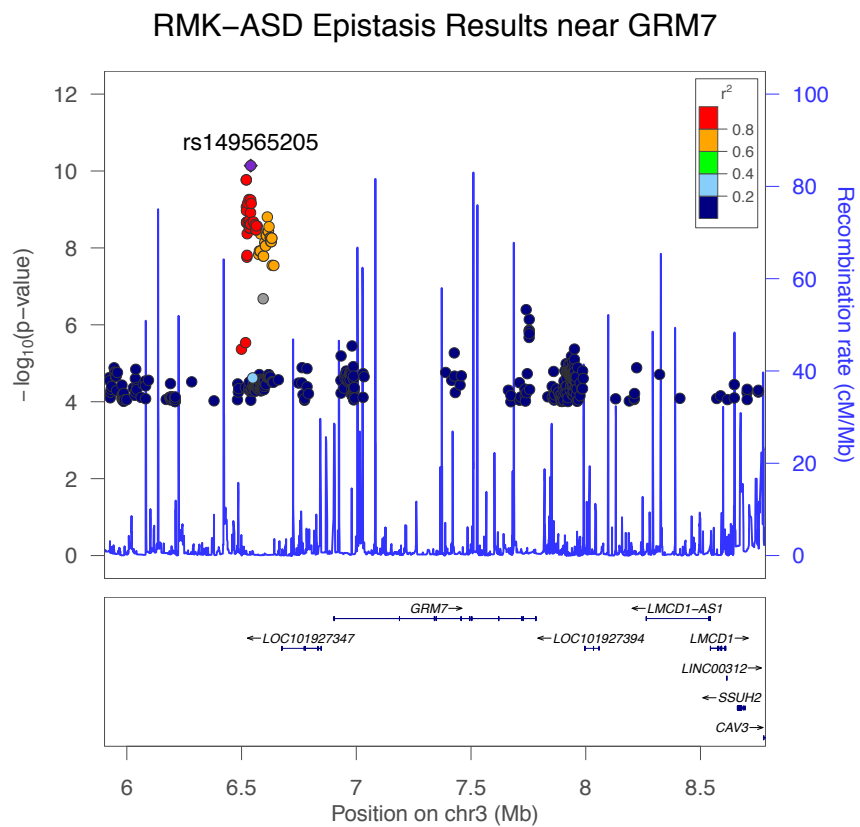


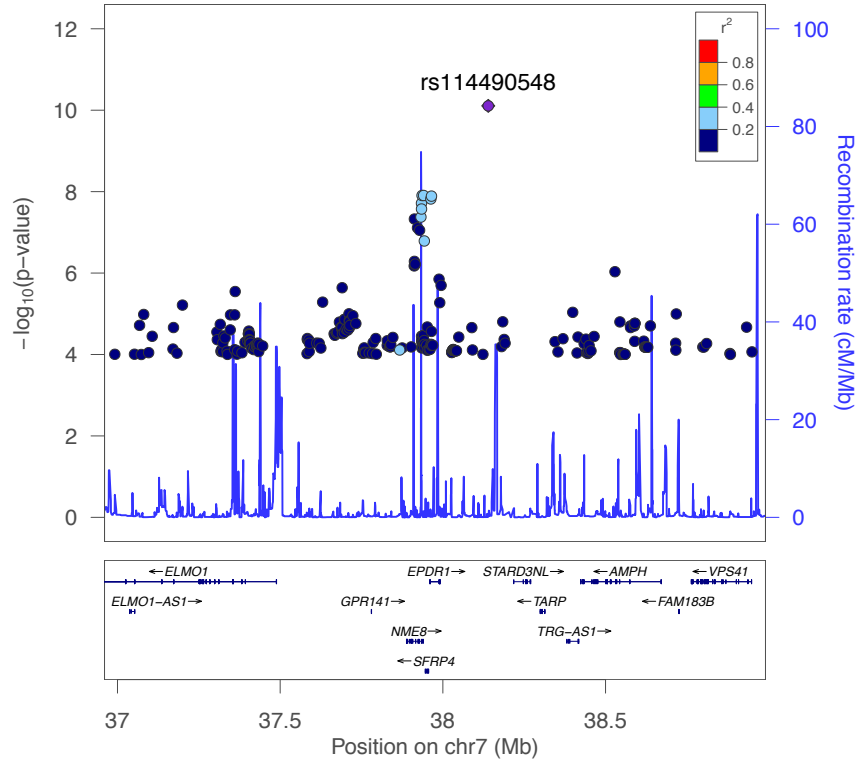
**Figure S1: Most significant epistasis results in ASD.** The graphs (A-F) display the regions containing the six most significant independent SNPs showing epistasis with Ras/MAPK SNPs. SNP position information is based on hg19 reference version and LD and recombination rate data are based on 1000 Genomes November 2014 EUR population. SNPs are colored based on linkage disequilibrium (LD) correlation ( $r^2$ ), or colored gray if no LD information exists. The overlaid blue line corresponds to the recombination rate. Plot were created using LocusZoom(14) (see web resources).

**A**



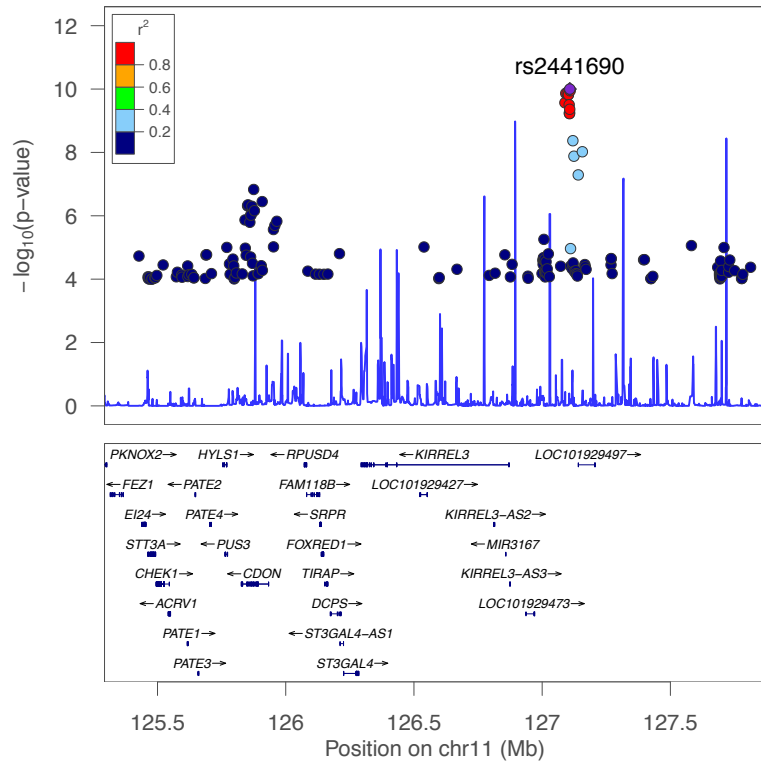
B

### RMK-ASD Epistasis Results near EPDR1



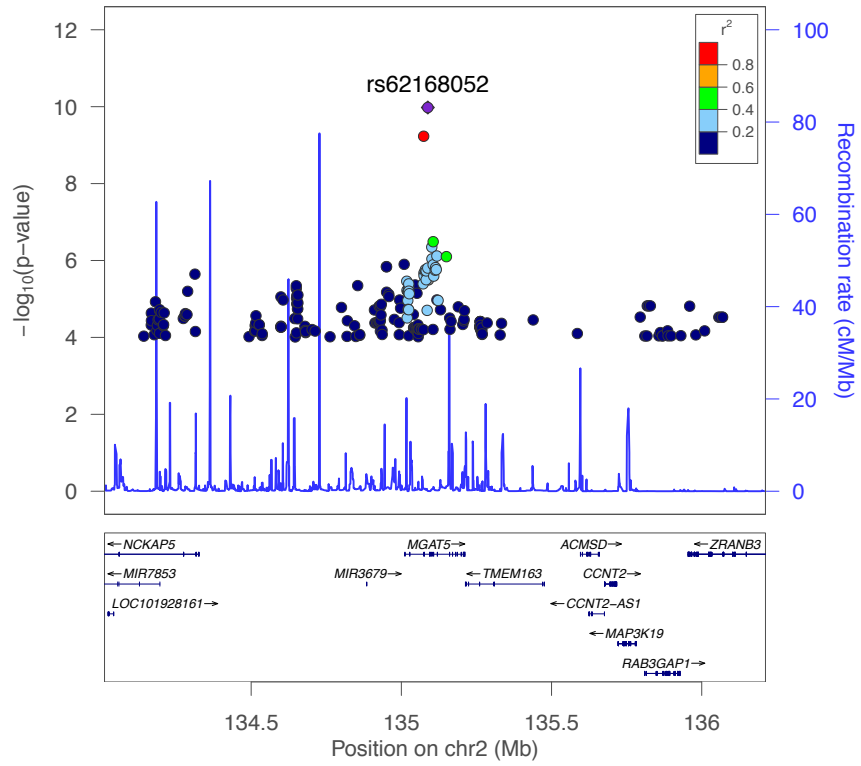
C

### RMK-ASD Epistasis Results near KIRREL3



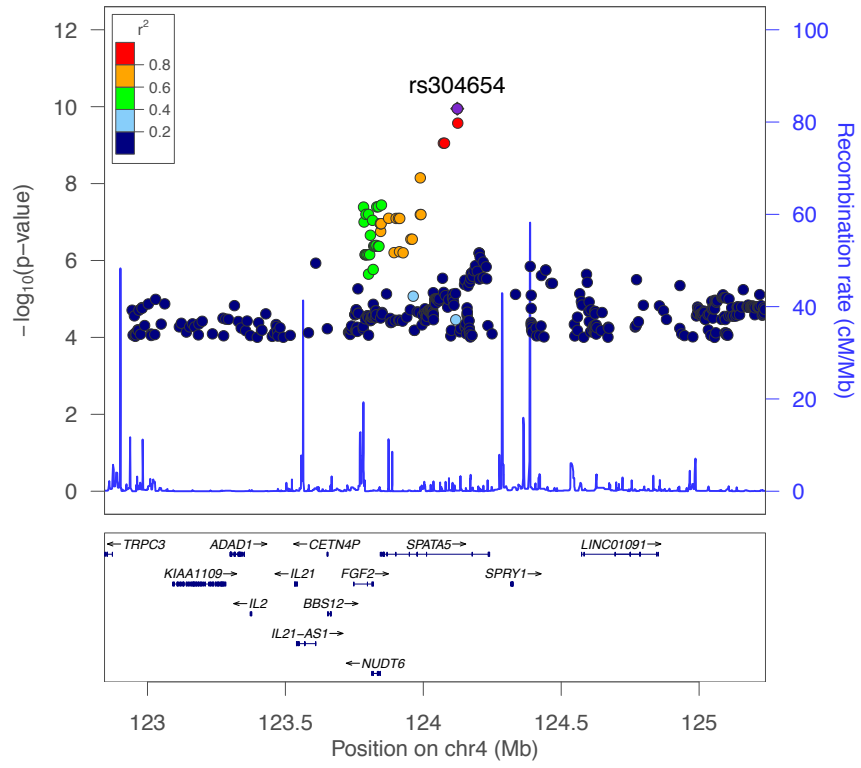
D

### RMK-ASD Epistasis Results near MGAT5



E

### RMK-ASD Epistasis Results near SPATA5



F

### RMK-ASD Epistasis Results near IL20RB

