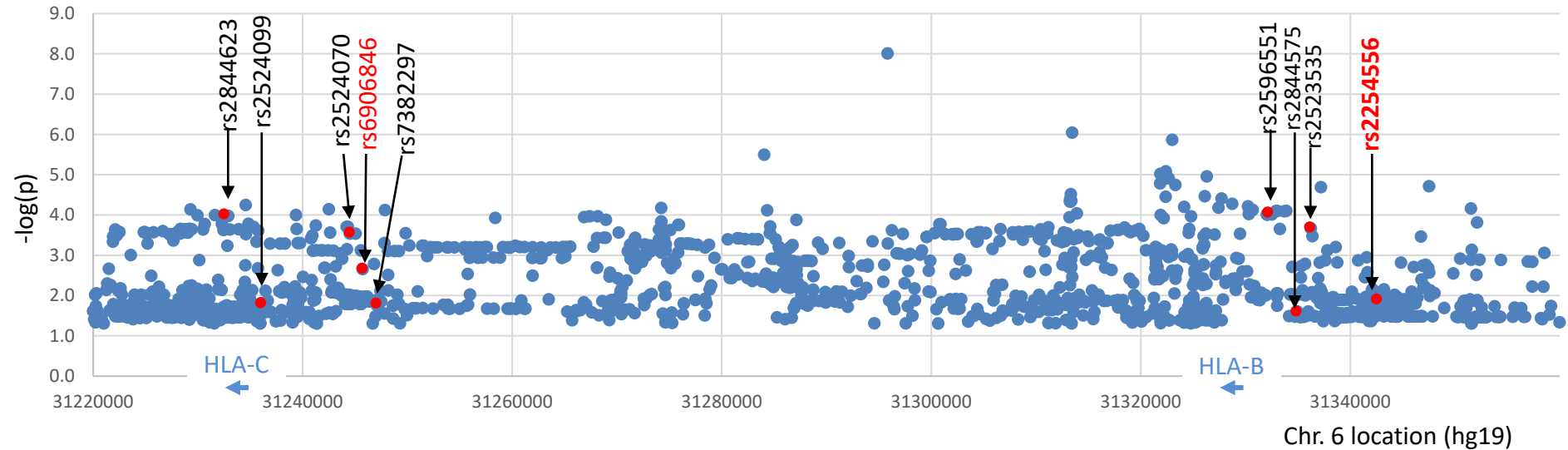


## Supplementary Fig 1. Log scale p-values for association of KD susceptibility and location of SNVs in the HLA class I region found by pathway analysis.



SNVs with association  $-\log(p) \geq 1.3$  ( $p < 0.05$ ) were shown in the figure. Red dots were nine SNVs (none in LD with  $r^2 > 0.8$ .) selected by pathway analysis followed by gene stability selection using European descent GWAS data. SNVs in red font were associated in Japanese GWAS cohort. HLA-B and C gene direction and locations were shown in blue arrows.