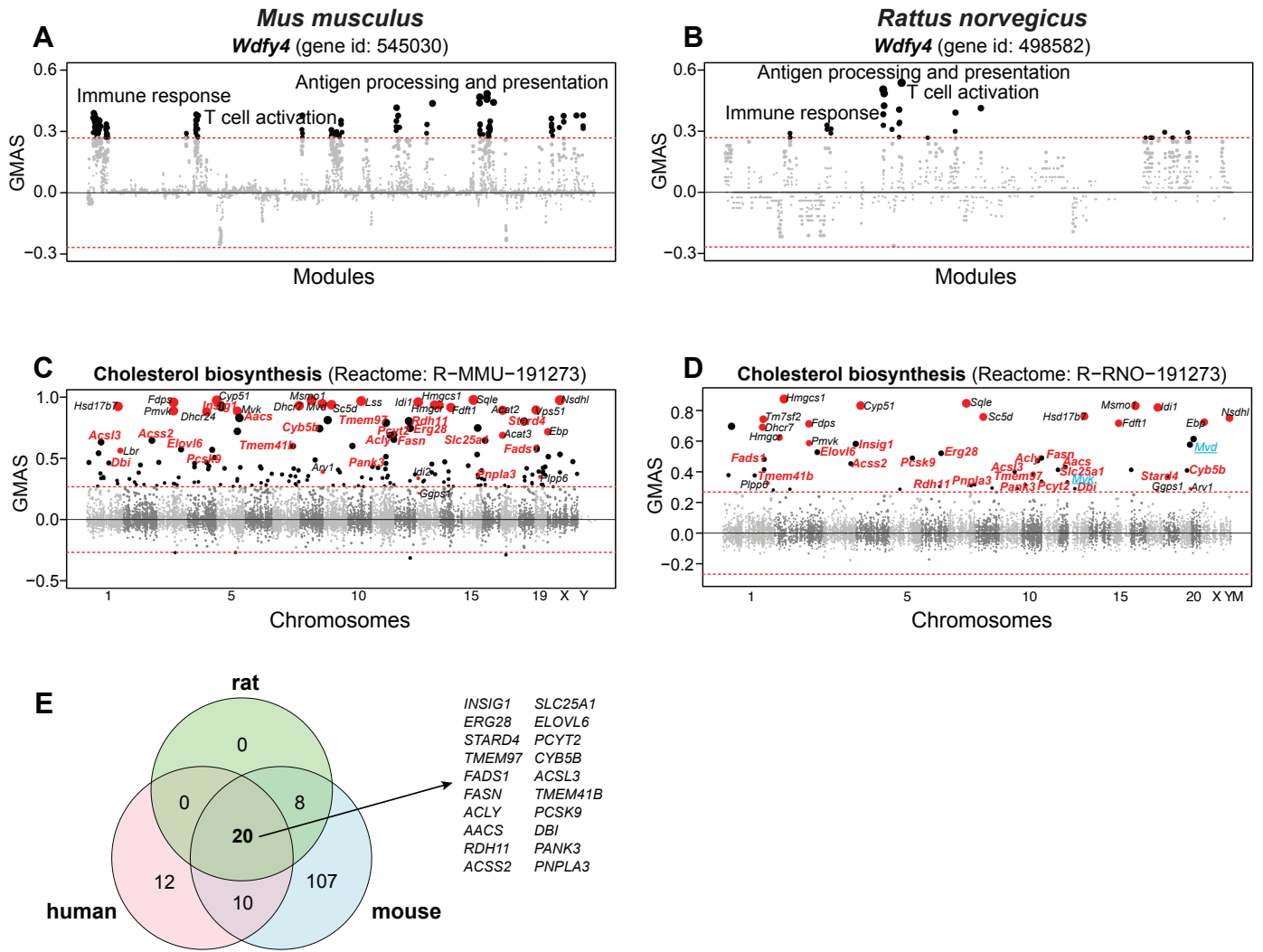# Figure S4

Figure S4. G-MAD in mouse and rat confirms the gene-module connections between *WDFY4* and T cell activation, and links 20 new genes with cholesterol biosynthesis.

A, B, G-MAD of *Wdfy4* in mouse (**A**) and rat (**B**) confirms its involvement in T cell activation and immune response. The threshold of significant gene-module association is indicated by the red dashed line. Modules are organized by the module similarities. Known modules connected to *Wdfy4* from annotations are shown in red dots (no connected modules for *Wdfy4*), and other modules with GMAS over the threshold are shown with black dots.

C, D, G-MAD confirms the involvement of novel genes in cholesterol biosynthesis in mouse (**C**) and rat (**D**). The threshold of significant gene-module association is indicated by the red dashed line. Genes are arranged based on their genetic positions. Genes annotated to be involved in cholesterol biosynthesis are shown in red dots, and genes with GMAS over 0.268 are shown in black dots. Novel genes conserved in human, mouse and rat are highlighted in red bold text. *Mvd* and *Mvk* (highlighted in blue text in **D**) are included in the annotation of cholesterol biosynthesis module in human and mouse, but not in rat.

E, Venn diagram comparing G-MAD results of cholesterol biosynthesis in human, mouse, and rat. 20 novel genes were identified with conserved associations with cholesterol biosynthesis in all 3 species.