



**Supplementary Fig. 4.** Differentially expressed genes (DEGs) in asialoglycoprotein receptor 1 (*Asgr1*<sup>-/-</sup>) mice were enriched in the phosphoinositide 3-kinase (PI3K)-protein kinase B (AKT) signal pathway. The liver tissues of high-fat diet-fed wild type (WT) and *Asgr1*<sup>-/-</sup> mice were collected for RNA sequencing ( $n=2$ ). (A) Gene set enrichment analyses of gene sets for PI3K-AKT signal pathway. (B) Heatmap shows hierarchical clustering of significant DEGs in *Asgr1*<sup>-/-</sup> mice compared to the WT mice. Values are column-scaled to show expression level. (C) Gene Ontology (GO) and Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway analysis of significant DEGs. NES, normalized enrichment score; PPAR, peroxisome proliferator-activated receptor; FoxO, Forkhead box O; MAPK, mitogen-activated protein kinase.