



**S1 Fig.** Difference in the number of valid reads according to stool storage method. (A) Fresh stool samples were immediately frozen in liquid nitrogen and stored at  $-80^{\circ}\text{C}$  refrigerator until DNA isolation. (B) Fresh stool samples were kept in a gas-generating pouch system to minimize exposure to a high oxygen ambient atmosphere for one week and then stool was stored at the  $-80^{\circ}\text{C}$  refrigerator until DNA isolation. Next, 16S rRNA gene sequencing from the stool DNA was analyzed. AOM, azoxymethane; CON, control; DSS, dextran sulfate sodium salt; KO, knockout; ORX, orchietomized; TP, testosterone propionate; WT, wild type.