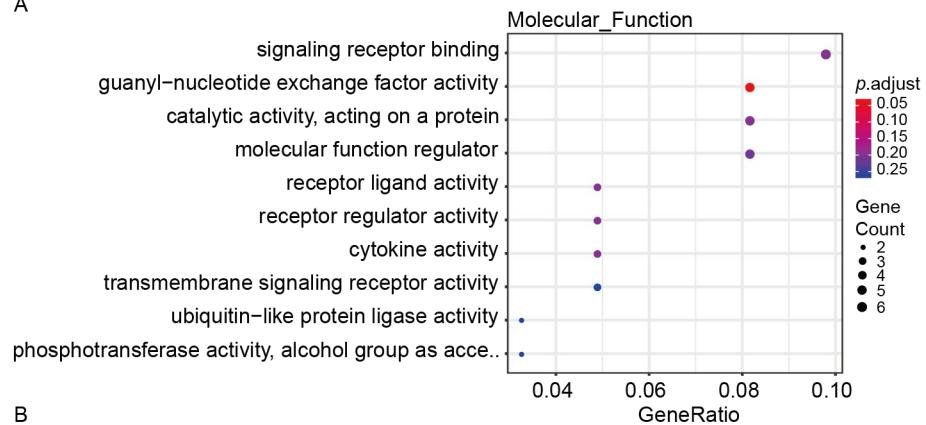


Figure S1 Overview of 3D organization in MM. A. Observed/expected contact matrices between chromosome pairs for Control (left panel) and MMC2 (right panel). B. GO enrichment analysis (BP) of genes with B-to-A switching event.

A



B

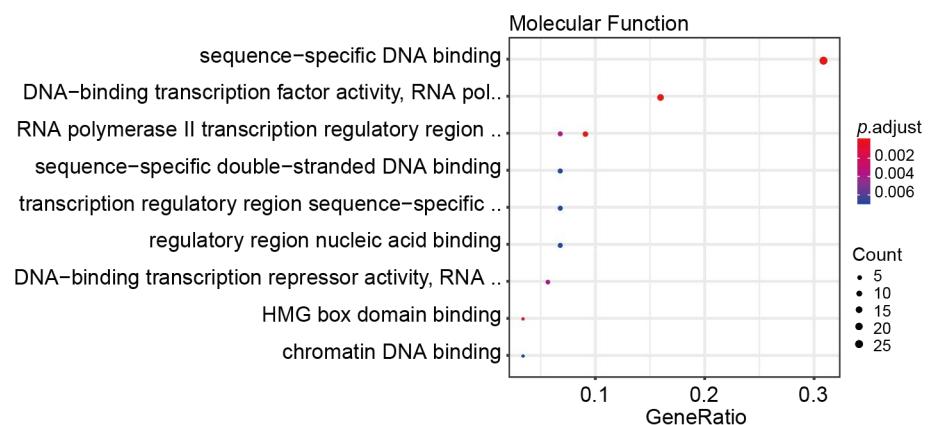


Figure S2 GO enrichment molecular function (MF) analysis of genes with TAD boundary of difference (A) and loop difference associated genes (B).

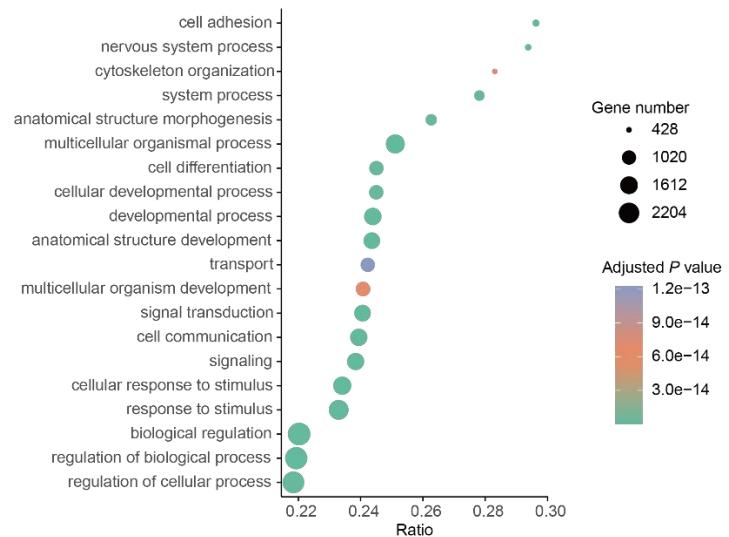
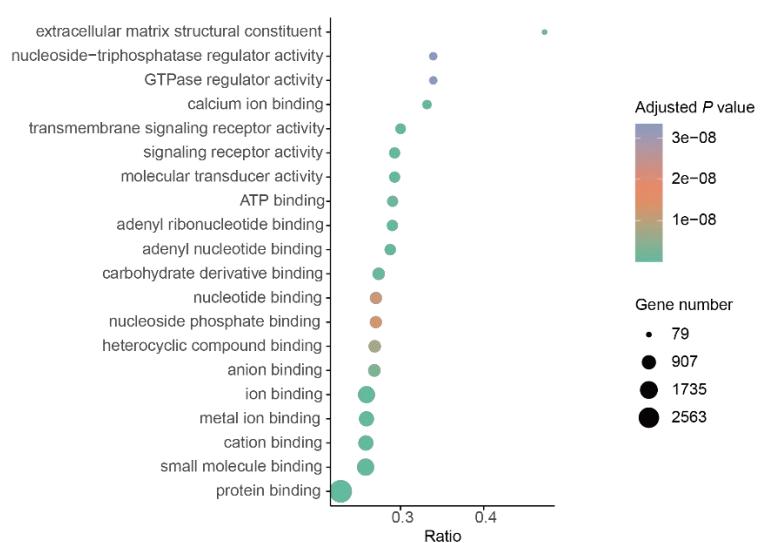
A**B**

Figure S3 GO enrichment biological process (BP) (A) and molecular function (MF) (B) and analysis of genes with variations in the CDS region.

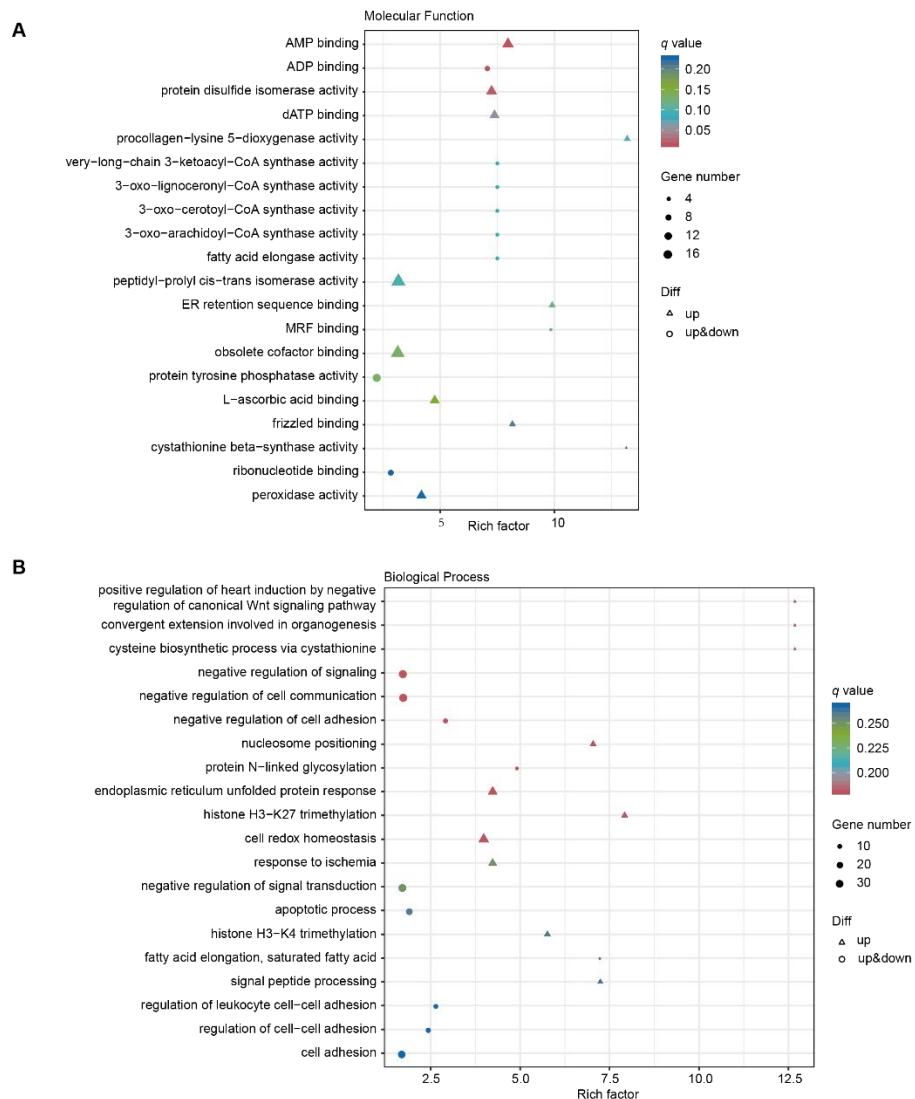


Figure S4 GO Enrichment Analysis on DEGs. Bubble chart of GO Molecular Function (A) and Biological Process (B) enrichment on DEGs. The top 20 enriched pathways (with the smallest Q-value) were shown.