

## Methylated DNA immunoprecipitation (MeDIP) sequencing

Genomic DNA was extracted from gastric tissues in Gan mice with a DNeasy Kit (TransGen, China). A total of **1.25  $\mu$ g** of genomic DNA were subjected to bisulfite conversion using the EZ DNA Methylation Gold Kit (Zymo Research, Irvine, CA). Approximately, 600 ng of bisulfite-converted DNA was analyzed on an Infinium Analyzer (Illumina). The sequencing service and bioinformatics analysis were afforded by the Shanghai Biotechnology Corporation. In addition, all the sequence raw data were uploaded in SRA database with the accession number **SRP151505**.