Figure S1. Histogram plot of MD incidence (%) rate. MD resistance in chickens is generally evaluated with MD incidence (induced gross tumors by MDV) and survival days post MDV challenge. The MD incidence data presented in Figure S1 were totally based on numbers of chickens that developed tumors post MDV challenge. The calculation was done as the ratio of number of birds with tumors/total number of birds challenged within each of the lines multiplied by 100.

Figure S2. Barplot of call rate for 30 chickens Affymetrix Axiom® Genome-Wide Chicken Genotyping, X axis represent the call rate values, and Y axis represents the chicken individuals.



Figure S3.Frequency distribution in auto chromosome for the total SNPs for the Affymetrix Axiom® Genome-Wide Chicken Genotyping Array(600K)

SNP count 527021.



Figure S4. Frequency distribution in auto chromosome for the total SNPs for the Affymetrix Axiom® Genome-Wide Chicken Genotyping Array(600K)

SNP count 155216 SNPs.

Figure S5 Comparison of ROH Region among three groups, Line 63, Line 72, Line RCS (C, L, M, N, S, X). The overlap length of ROH were indicated in Kb.