The genome of the chicken, *Gallus domesticus* contains endogenous retrovirus that displays base sequences of high similarity to Avain leukosis class of retroviruses. The presence of endogenous retrovirus DNA band is associated with disease resistance in chicken. This study had used microsatellite and CR1 markers techniques to investigate endogenous retrovirus (ev-21) DNA band of native and broiler chicken, with the total of 72 individuals. Primer was used to present polymorphic DNA bands and the results of inheritance could be explained following the Mendelian Law. The DNA was detected for polymorphic bands by using primer specific of USIL to ev-21 locus. The result indicated that DNA polymorphism was different between native and broiler chicken. It was found that 2 allele with frequency 0.972, 0.028 and 0.600 0.400 in native and broiler chicken, respectively. By using primer ADL117, ADL201 and MSU70 linked with ev-21 locus on the chicken Z chromosome and using primer ADL150, ADL160, ADL234 and ADL252 which known location on chicken chromosome 1, the DNA pattern of 2-4 allele was observed depending on the primer used. It is likely that the genetic variation within the 2 groups of population was caused by the evolution by different selection. This difference of allele frequency can be used to study the effect of disease and economic trait on endogenous retrovirus in the future.