



Post-chicken genome project: Development and application of novel chicken genes

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As the first step of genomics research in chicken, we have initiated cDNA library construction and single pass sequencing of chicken ESTs. Using bioinformatical analysis, we are now screening genes which are homologous to mammalian genes and to do in depth research about these genes. And also about non-homologous sequences, functional genomics approach will be performed and screen useful genes to be characterize their functions. Based on sequence homology, chicken sequences homologous to mammalian genes were characterized and subjected to functional study. Function of non-homologous sequences also was studied after screening by expression profiles with RT-PCR, realtime PCR, immunohistochemistry and microarray. ESTs and interesting genes which constructed in these researches might be valuable resources for genomics study of chicken.