Description of Additional Supplementary Files

Supplementary Data 1

Description: Statistics of assemblies of W chromosomes in birds uploaded to public database.

Supplementary Data 2

Description: The results of alignments between the crested ibis' neo-Z chromosome and chicken's genome.

Supplementary Data 3

Description: The results of alignments between the crested ibis' neo-W chromosome and chicken's genome.

Supplementary Data 4

Description: List of identified one-to-one gametologs between the neo-Z and W chromosomes of crested ibis.

Supplementary Data 5

Description: Identified one to one orthologs among chromosome 22 of chicken, neo-W and neo-Z chromosomes of crested ibis.

Supplementary Data 6

Description: Genes retained in the ancient-SDR of the neo-W chromosome of crested ibis.

Supplementary Data 7

Description: The expression profiles of ovary specific genes on ancient-SDR of the neo-W chromosome of crested ibis.

Supplementary Data 8

Description: Chicken chr22 Sequences and primers for specific probes synthesis.

Supplementary Data 9

Description: Accessions of Genome and RNA data of other species.by a two-serial MEG bank.