

The genome of the chicken DT40 bursal lymphoma cell line

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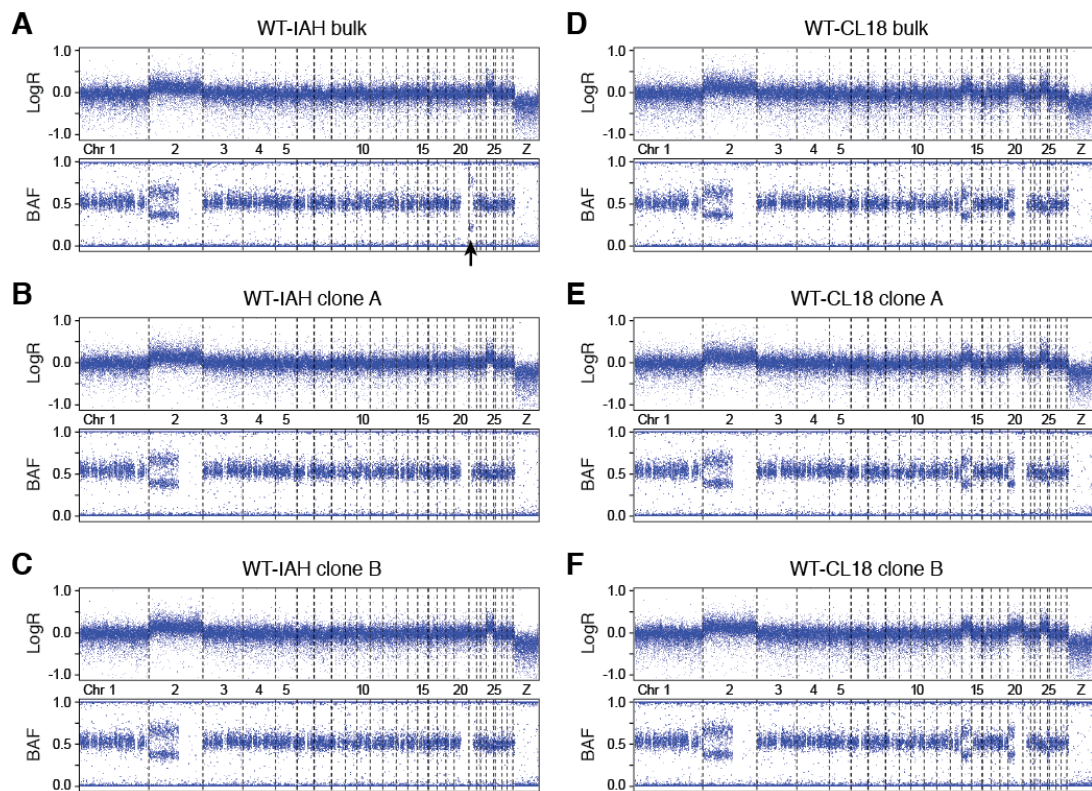


Figure S1 SNP array hybridisation analysis of two wild type DT40 cell line stocks

The 60,000 SNPs are lined up on the x axis in order of genomic occurrence. Chromosome boundaries are marked by dashed lines, chromosome numbers are shown between the two panels. SNPs in genomic regions unassigned to chromosomes are omitted. Top panel, signal intensity (LogR ratio, LogR); the increased copy number of chromosomes 2 and 24 is apparent. Bottom panel, B allele frequency (BAF). (A) a bulk population of the WT-IAH wild type line, with an arrow to point out partial loss of heterozygosity on chromosome 21. (B, C) two independent single cell clones of the WT-IAH wild type line. (D) a bulk population of the WT-CL18 wild type line. (E, F) two independent single cell clones of the WT-CL18 wild type line.

Table S1 De novo assembly of 100 bp paired end reads of the DT40 cell line genome

Number of reads		634926640
Contigs >=100nt	Number	263483
	Total length (nt)	1000960390
	Average (nt)	3798
	N50 (nt)	9330
	Median (nt)	1569
	Largest (nt)	143906
Contigs >=500nt	Number	177396
	Total length (nt)	981176273
	Average (nt)	5530
	N50 (nt)	9559
	Median (nt)	3326
	Largest (nt)	143906
Scaffolds >=100nt	Number	163017
	Total length (nt)	1018805696
	Average (nt)	6249
	N50 (nt)	25980
	Median (nt)	406
	Largest (nt)	328220
Scaffolds >=500nt	Number	77582
	Total length (nt)	999338724
	Average (nt)	12881
	N50 (nt)	26540
	Median (nt)	6615
	Largest (nt)	328220

Table S2 Regions of loss of heterozygosity in the DT40 genome

Table S2 is available for download at <http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.114.013482/-/DC1>

Table S3 Single nucleotide variations in the DT40, Taiwan L2 and Silkie genomes

Mutation type	DT40	Taiwan L2	Silkie
All ¹	6251553	6255745	6329640
Intergenic ²	3226619	3239755	3282440
Intergenic (Upstream w/in 1kb) ³	89153	86651	83673
Intergenic (Downstream w/in 1kb) ⁴	81725	83084	82473
Intergenic (Up/Down w/in 1kb) ⁵	6218	6002	5469
Intronic ⁶	2692379	2683657	2722589
Non-coding Intron ⁷	18	4	17
Non-coding Exon ⁸	895	819	894
Non-coding splicing site ⁹	2	1	1
UTR5 ¹⁰	12514	11308	10419
UTR3 ¹¹	63259	64593	64219
UTR5;UTR3 ¹²	73	104	66
Intron splicing site ¹³	369	382	363
Exon splicing site ¹⁴	1174	1172	1124
Coding exon ¹⁵	78329	79385	77017
Synonymous ¹⁶	54916	56238	54962
Nonsynonymous ¹⁷	23184	22906	21851
Stop Gain ¹⁸	175	167	157
Stop Loss ¹⁹	27	29	29
Unknown ²⁰	27	45	18

¹all filtered variants

²variant in intergenic region

³variant overlaps 1-kb region upstream of transcription start site

⁴variant overlaps 1-kb region downstream of transcription end site

⁵variant overlaps a gene

⁶variant overlaps an intron

⁷variant overlaps a transcript without coding annotation in the gene definition and overlaps an intron

⁸variant overlaps a transcript without coding annotation in the gene definition and overlaps the exonic region

⁹variant overlaps a transcript without coding annotation in the gene definition and variant is within 2-bp of a splicing junction

¹⁰variant overlaps a 5' untranslated region

¹¹variant overlaps a 3' untranslated region

¹²variant overlaps a 5' untranslated region and a 3' untranslated region (e.g overlapping transcripts)

¹³variant overlaps an exon

¹⁴variant is within 2-bp of a splicing junction

¹⁵variant overlaps coding sequence

¹⁶variant is a silent mutation

¹⁷variant changes amino acid sequence

¹⁸variant is a nonsense mutation

¹⁹variant changes stop codon

²⁰variant is in an incomplete ORF

Table S4 Mutated genes in the DT40 genome

Table S4 is available for download at <http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.114.013482/-/DC1>

File S1

Computer scripts used in data analysis

File S1 is available for download at <http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.114.013482/-/DC1>