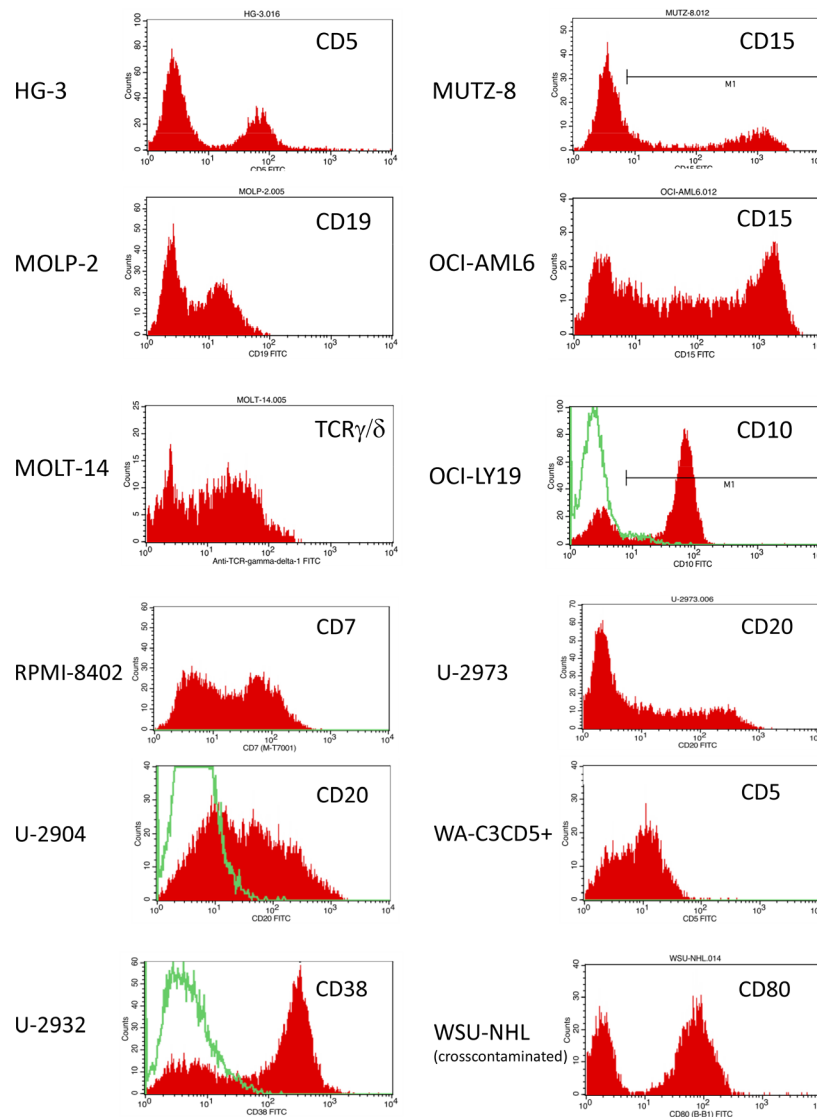
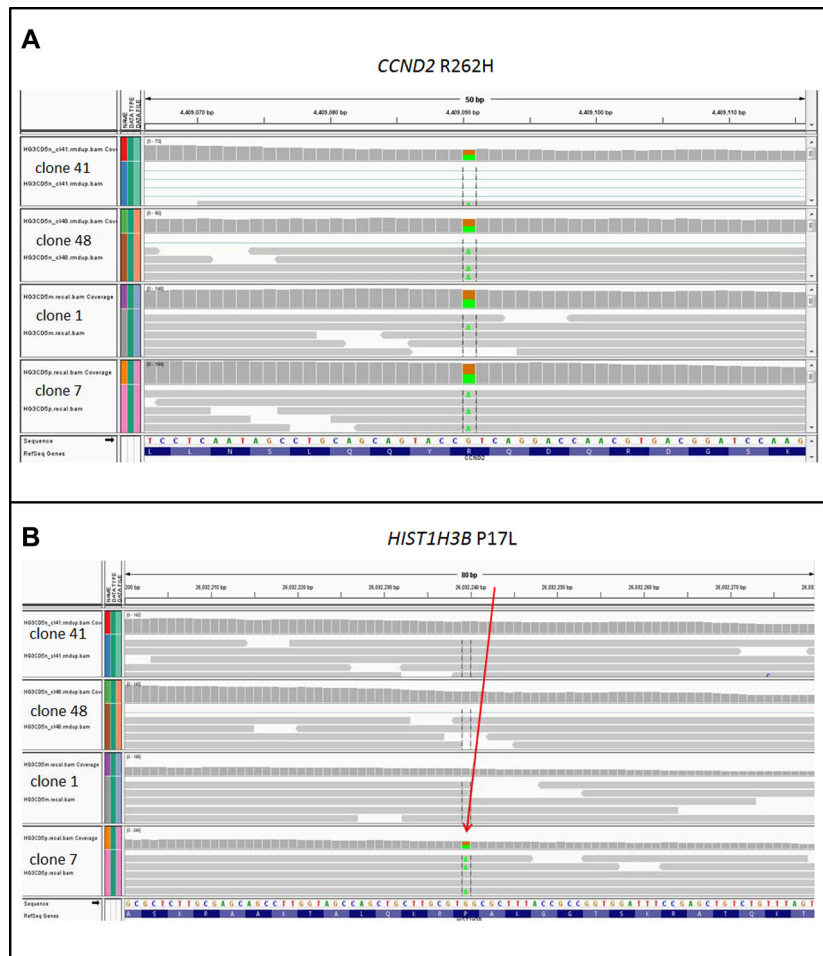


Subclones in B-lymphoma cell lines: isogenic models for the study of gene regulation

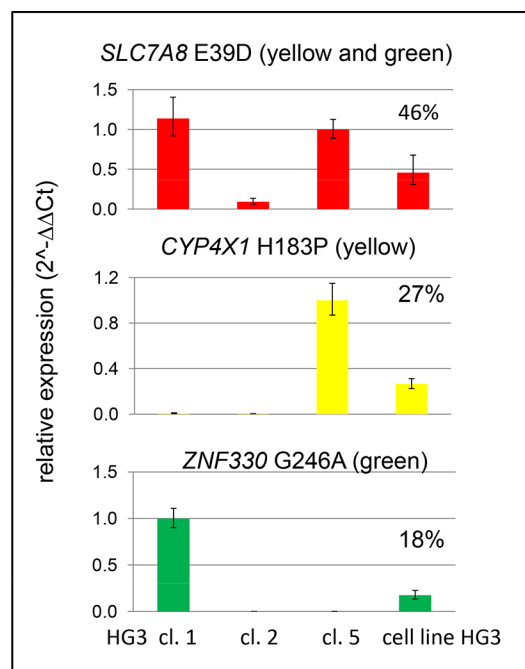
Supplementary Materials



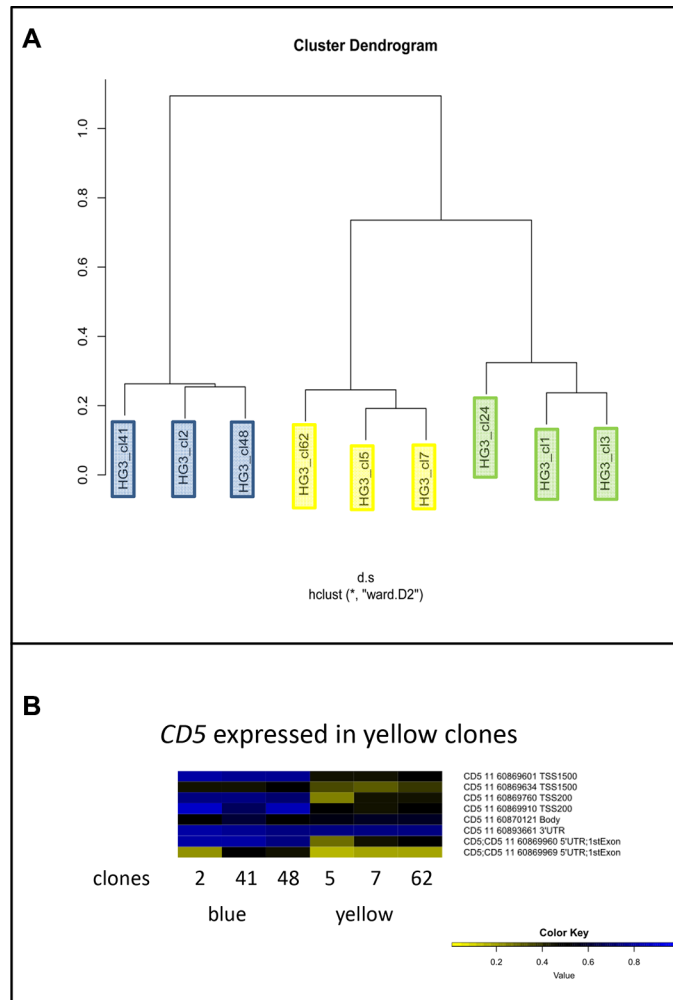
Supplementary Figure S1: Bimodal surface markers expression. Flow cytometry revealed bimodal expression surface markers on 12 cell lines of various hematopoietic lineages. The ratio of the individual populations (marker^{POS} and marker^{NEG}) is not always the same in different batches, indicating that the size of the populations is variable.



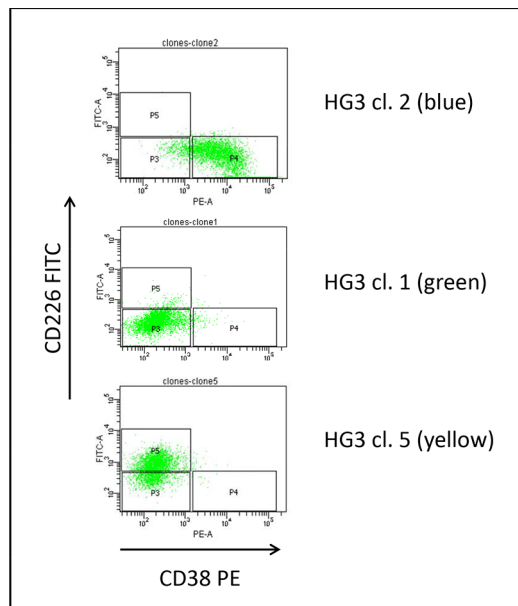
Supplementary Figure S2: WES results. (A) The *CCND2* R262H mutation was detected in all four single cell clones sequenced. The variant had been described as rare SNP (rs 142170178; MAF < 0.01). (B) The *HIST1H3B* P17L mutation (arrow) was found in one of the four single cell clones.



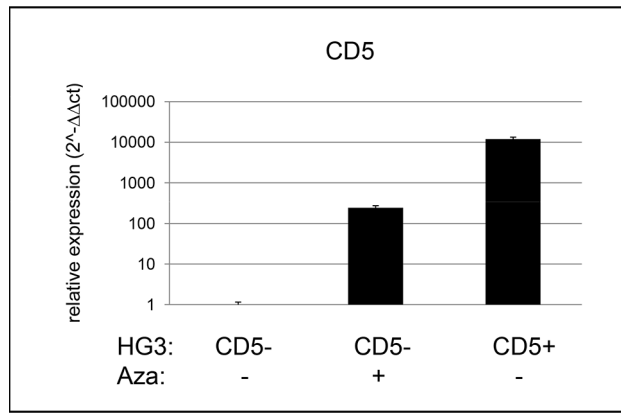
Supplementary Figure S3: Lineage-specific quantitative genomic PCR. Genomic qPCR was performed to assess the clonal composition of cell line HG3. Single cell clones carrying a specific mutation were used as reference.



Supplementary Figure S4: DNA methylation analysis. (A) Methylation analysis reveals the same clonal structure of cell line HG3 as mutational analysis and expression array analysis (see Figure 4A, 4B). (B) Yellow clones are CD5⁺, blue clones are CD5⁻. Repression is accompanied by DNA methylation. Color code: blue (high methylation), yellow (low methylation).



Supplementary Figure S5: CD38 and CD226 expression on clones of cell line HG3. Expression of surface antigens was determined using PE-labeled CD38 and FITC-labeled CD226 Abs.



Supplementary Figure S6: CD5 expression after DNA demethylation. *CD5* mRNA expression of HG3 cells (CD5- population) was assessed by qPCR. Aza (5 μM) was given for 72 h.

Supplementary Table S1: Ig hypermutation of B-lymphoma cell lines. See Supplementary_Table_S1

Supplementary Table S2: Cell lines with bimodal surface markers. See Supplementary_Table_S2

Supplementary Table S3: Subclone-characteristic mutations. See Supplementary_Table_S3

Supplementary Table S4: Clonal composition of cell line HG3. See Supplementary_Table_S4

Supplementary Table S5: Sequence of Ig rearrangement primers

VH1	forward	5'- GGC CTC AGT GAA GGT CTC CTG CAA G - 3'
VH2	forward	5'- GTC TGG TCC TAC GCT GGT GAAA ACC C - 3'
VH3	forward	5'- CTG GGG GGT CCC TGA GAC TCT CCT G - 3'
VH4	forward	5'- CTT CGG AGA CCC TGT CCC TCA CCT G - 3'
VH5	forward	5'- CGG GGA GTC TCT GAA GAT CTC CTG T - 3'
VH6	forward	5'- TCG CAG ACC CTC ACT CAC CTG TG - 3'
JH concensus	reverse	5'- CTT ACC TGA GGA GAC GGT GAC C - 3'

Supplementary Table S6: Sequence of ARMS primers. See Supplementary_Table_S6