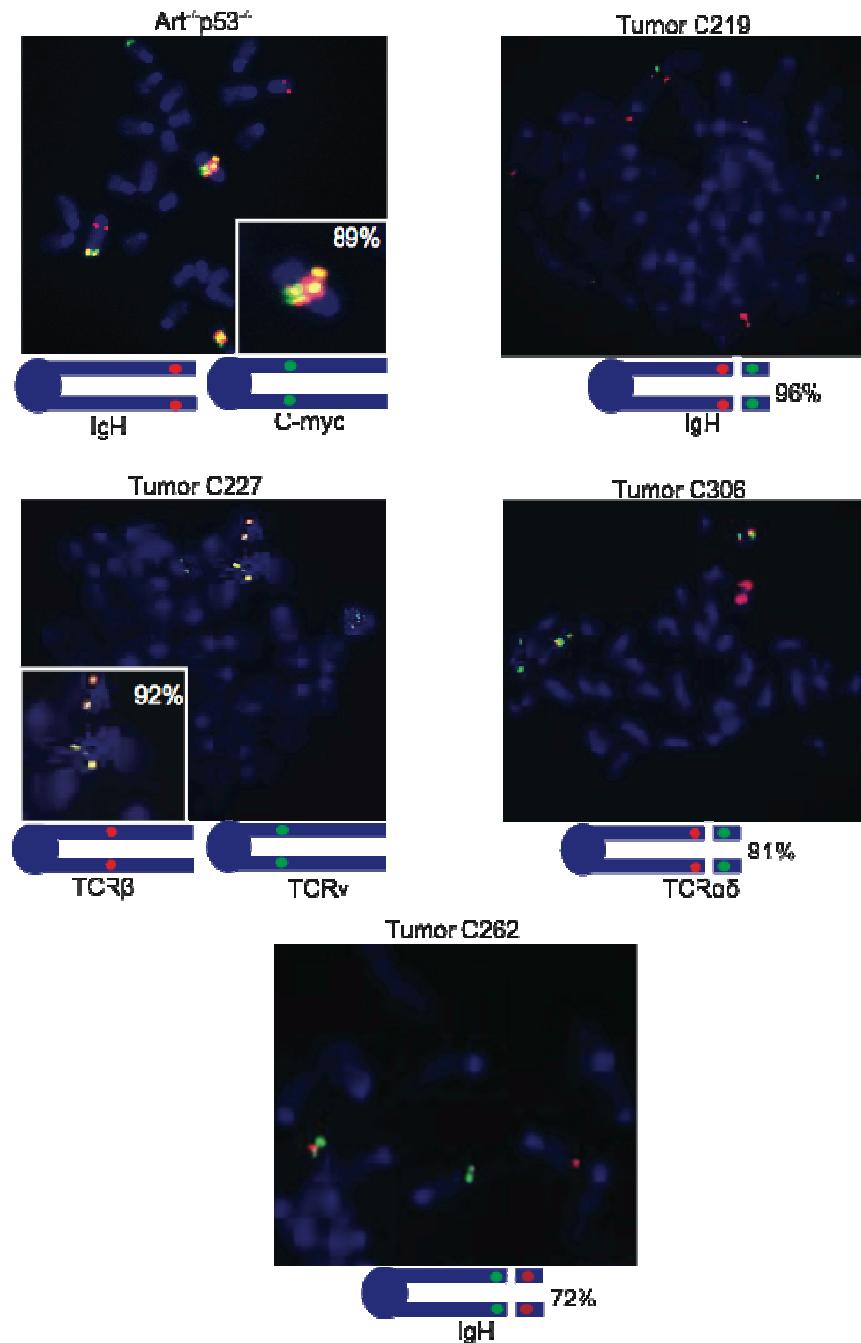


## SUPPLEMENTARY METHODS

Primer sequences for PCR amplification reactions:

TCR $\beta$ V5S1a	TGG TAT CAA CAG ACT CAG GGG
TCR $\beta$ V5S1b	TTC TCA GTC CAA CAG TTT GAT
TCR $\beta$ V5S1c	GAC TCT GCC GTG TAC TTC TGT GCC
TCR $\beta$ J2a	TCT ACT CCA AAC TAC TCC AG
TCR $\beta$ J2b	CCT CCA AGC GAGG AGA TGT GAA
TCR $\beta$ J2c	AAA CCG TGA GCC TGG TGC CG
TCR $\gamma$ V3S1a	ACC ATA CAC TGG TAC CGG CA
TCR $\gamma$ V3S1b	ACC CCT ACC CAT ATT TTC TTA G
TCR $\gamma$ V3S1c	ATC TAC TAC TGT TCC TAC GG
TCR $\gamma$ J1/2a	TCA TCA CTG GAA TAA AGC AG
TCR $\gamma$ J1/2b	GGT ACT TAC CGG AGG GAA TT
TCR $\gamma$ J1/2c	TCC TTC TGC AAA TAC CTT GT
p $\kappa$ Ja	GGA GAG TGC CAG AAT CTG GTT TCA G
p $\kappa$ 6a	TGC ATG TCA GAG GGC ACA ACT G
p $\kappa$ 6b	CTA CCA AAC TTT GCA ACA CAC AGG C
p $\kappa$ 6c	ACA TGT TGC TGT GGT TGT CTG GTG
p $\kappa$ 6d	GAC CAG CAT GGG CAT CAA GAT GGA GAC
p $\kappa$ g	GGT ATC AAC AGA AAC CAG GGC AAT CTC C
p $\beta$ a	GCA TTC ATA TCA CAC AGT GAG CAC C
p $\beta$ b	GGG GTG TAC CAT AAA GGG GAA ATC A
p $\beta$ c	GCA GTT AGG TTA TCA GAG GAG GGC A
p $\beta$ d	TGG CCA GGT AGA GTC GGT GG
p $\beta$ e	TGA GAG CTG TCT CCT ACT ATC GAT
p $\beta$ f	AGA GTC GGT GGT GCA ACT GAA CCT
p $\beta$ g	TGA GAA GCA GCT TCT CCG TG

### SUPPLEMENTARY FIGURE



**Supplementary Figure 1. FISH analyses of Art-P70/p53 tumor metaphases.** Chromosomal anomalies in metaphases from primary tumors or early passage cultured tumor cells were analyzed by FISH using the indicated BAC probes. Red and green fluorescent signals, as diagrammed. Art<sup>-/-</sup>p53<sup>-/-</sup> (C405), C219, pro-B lymphomas; C227, C306, C262, thymic lymphomas. Representative metaphase images are shown. Percentage of metaphases with the indicated anomalies is indicated. At least 20 metaphases from each tumor were analyzed.