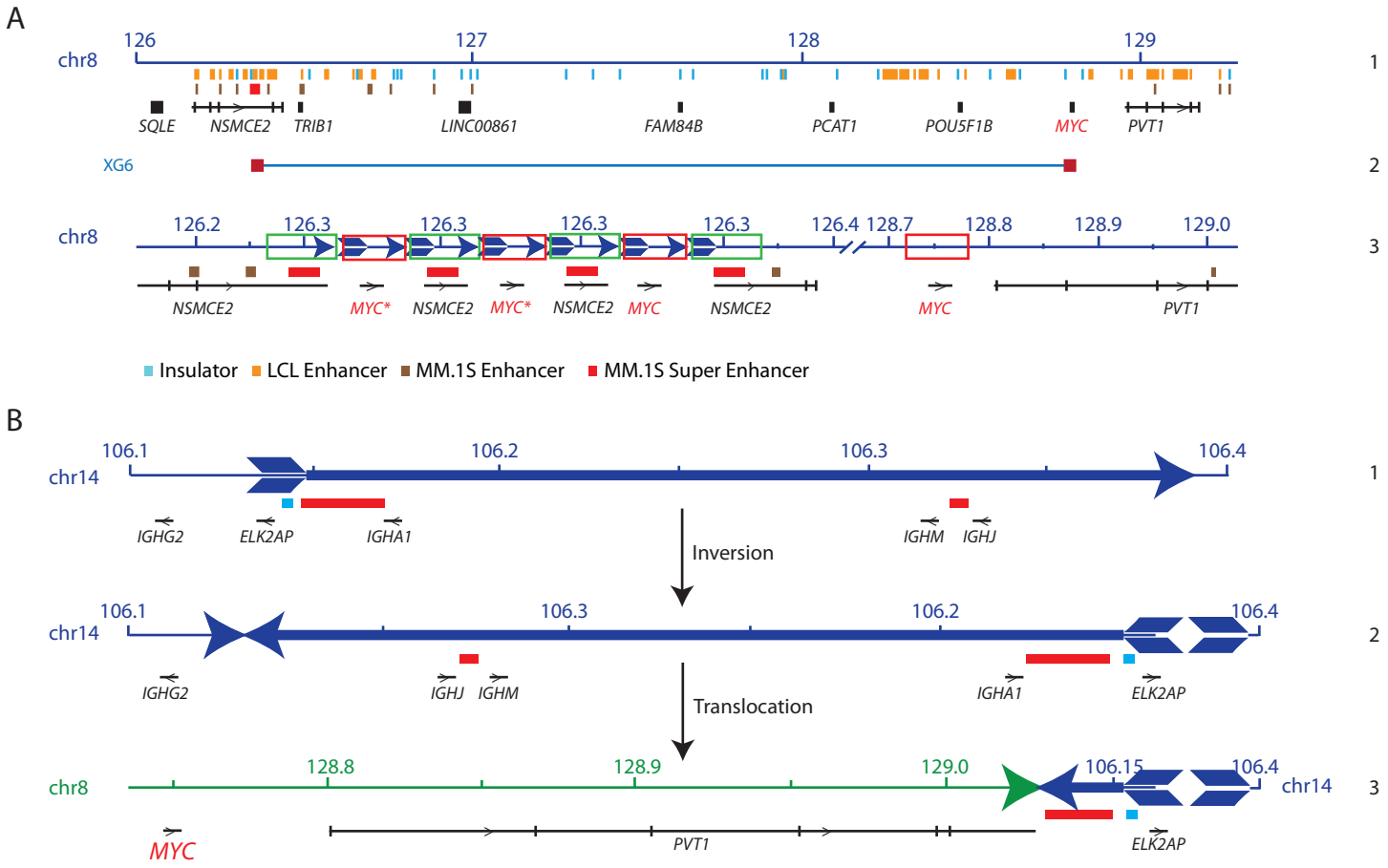

Supplemental Figure 2. MYC rearrangements in XG-6 and LP1 MMCLs

A) XG6. Line 1 shows the MYC locus with the location of genes and regulatory elements as indicated. Line 2 depicts the CGH result for XG6, with a 2.3 fold copy number gain of ~38 kb segments in intron 4 of NSMCE2 and MYC. Line 3 shows a model that incorporates CGH data, breakpoint sequences, content of reference and variant MYC alleles in genomic DNA and RNA in the MMCL, and analyses of single normal and rearranged chromosomes from XG6 that are present in somatic cell hybrids. The two regions of copy number gain are boxed, with at least three copies of MYC juxtaposed to enhancers in intron 4 of NSMCE2. The chromosome containing the MYC rearrangement contains two reference and two variant (marked by asterisk) MYC alleles, whereas the chromosome lacking the MYC rearrangements contains only the reference MYC allele, consistent with MYC expression only from the rearranged MYC locus.

B) LP1. Line 1 shows a region from an unrearranged IGH locus on chr14. A combination of metaphase FISH and approximate breakpoints from mate pair sequences shows that the variant t(8;14) IGH translocation in LP1 involves two rearrangement events: 1) an inversion on chr14 as depicted on line 2; and 2) a translocation of the telomeric end of chr14 approximately 250 kb telomeric of MYC on chr 8. As a result, the IGH 3' insulator is not positioned between MYC and the 3' IGH SE.