



Figure 5. Control of monoallelic V(D)J recombination and subnuclear location of the *IgH* locus in early B-cell development. (A) Control of monoallelic V(D)J recombination by pairing of *IgH* alleles. See Section 4.2 for detailed explanation of the model describing the regulation of V(D)J recombination at the *IgH* locus (black line) by the RAG1/2 endonuclease (brown) and repair-checkpoint protein ATM (yellow). (B) Subnuclear location of the two *IgH* alleles at different stages of early B-cell development. The distal V_H region (red) and proximal J_H - C_H domain (green) of the *IgH* locus are indicated together with their location relative to the repressive compartments at the nuclear periphery (gray) and pericentromeric heterochromatin (blue). The contraction and decontraction of the *IgH* alleles are schematically shown.