

Figure 7. Contraction of the Immunoglobulin Heavy-Chain Locus in pro-B Cells

The IgH locus consists of a proximal domain containing diversity (D), joining (J), and constant (C) gene segments, and a large variable (V) gene cluster with ~200 V genes spread over a 2.4-Mb region. The IgH locus is in an extended configuration in $Pax5^{-/-}$ or $Ezh2^{-/-}$ pro-B cells, which allows V(D)J recombination to take place only in the proximal domain. In wild-type pro-B cells, all V_H genes participate in V_H -DJ_H rearrangements due to contraction of the IgH locus by looping.

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