## Open Peer Review on Qeios

## Immunoglobulin Kappa Locus

National Cancer Institute

## Source

National Cancer Institute. Immunoglobulin Kappa Locus. NCI Thesaurus. Code C26425.

This region represents the germline organization of the kappa light chain locus. The locus includes V (variable), J (joining), and C (constant) segments. During B cell development, a recombination event at the DNA level joins a single V segment with a J segment; the C segment is later joined by splicing at the RNA level. Recombination of many different V segments with several J segments provides a wide range of antigen recognition. Additional diversity is attained by junctional diversity, resulting from the random additional of nucleotides by terminal deoxynucleotidyltransferase, and by somatic hypermutation, which occurs during B cell maturation in the spleen and lymph nodes. (from LocusLink)