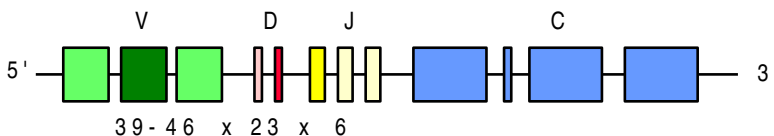


# Immunoglobulin (IG) synthesis

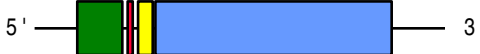
**150**  
**FUNCTIONAL IG GENES**

**HEAVY CHAIN**



**6300**

**POTENTIAL RECOMBINATIONS**

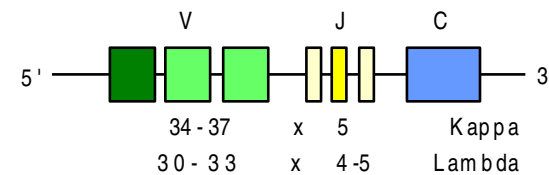


ABOUT  **$6.3 \times 10^6$**  POSSIBILITIES

**N-DIVERSITY  
SOMATIC MUTATIONS**

**$\times 1000$**

**LIGHT CHAIN**



**185 + 165**

**POTENTIAL RECOMBINATIONS**



ABOUT  **$3.5 \times 10^5$**  POSSIBILITIES

**$2 \times 10^{12}$**   
**DIFFERENT ANTIBODIES**

