

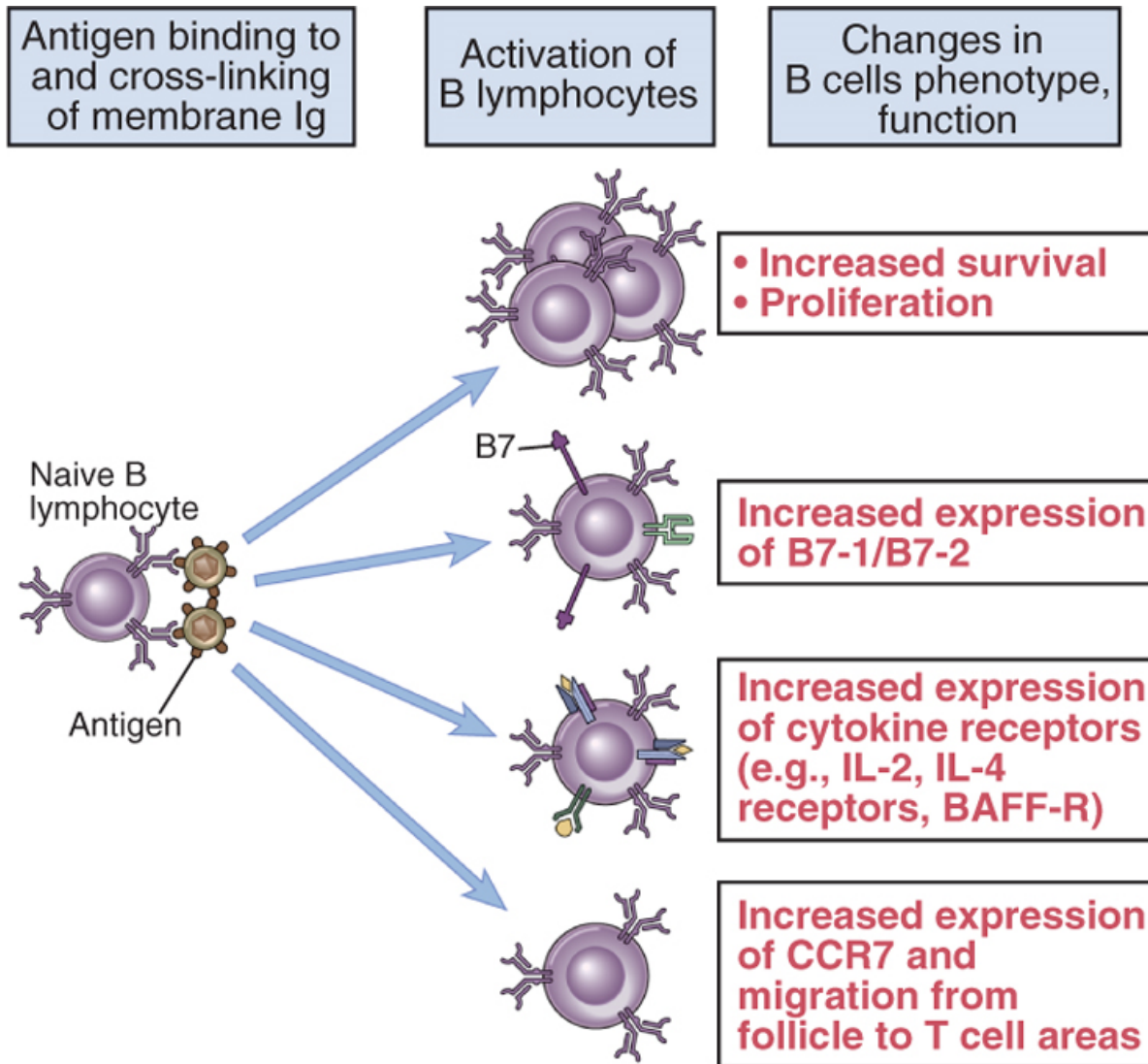
BMI5732

T CELL DEPENDENT B CELL ACTIVATION

- Quick review T dependent and independent B cell activation
- Dynamics
- The role of CD40/CD40L
- Organization of the immunoglobulin locus and constant regions
- Isotype switching
- Affinity maturation

Ana Paula Lepique

B lymphocyte activation



- Quick review T dependent and independent B cell activation

T independent

Antigens have varied chemical structure or composition

Production of IgM>IgG

T dependent

Protein antigens (haptens)

Antigen presentation to T cells

More potent, isotype switching, affinity maturation

IgG, IgE, IgA

- Quick review T dependent and independent B cell activation – still need to signals....

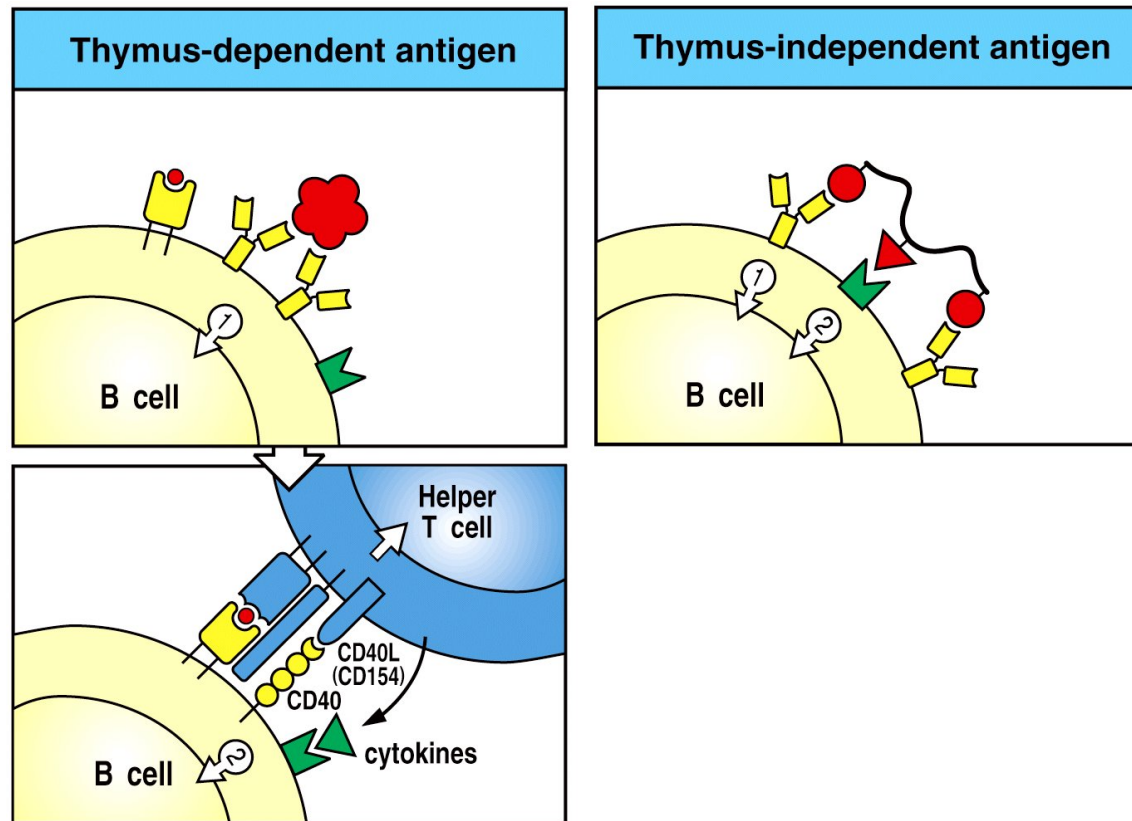
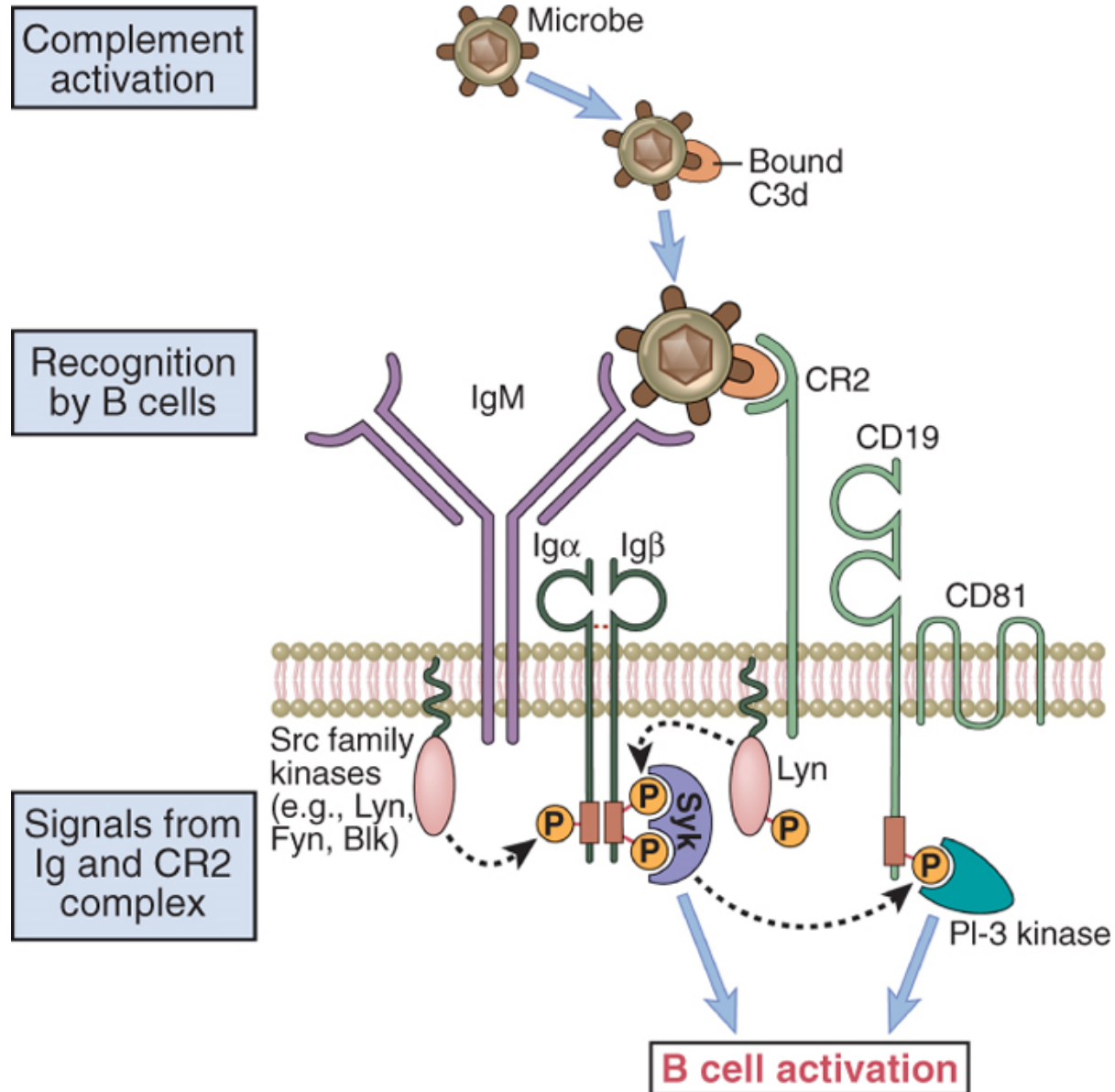


Figure 9-2 Immunobiology, 6/e. (© Garland Science 2005)

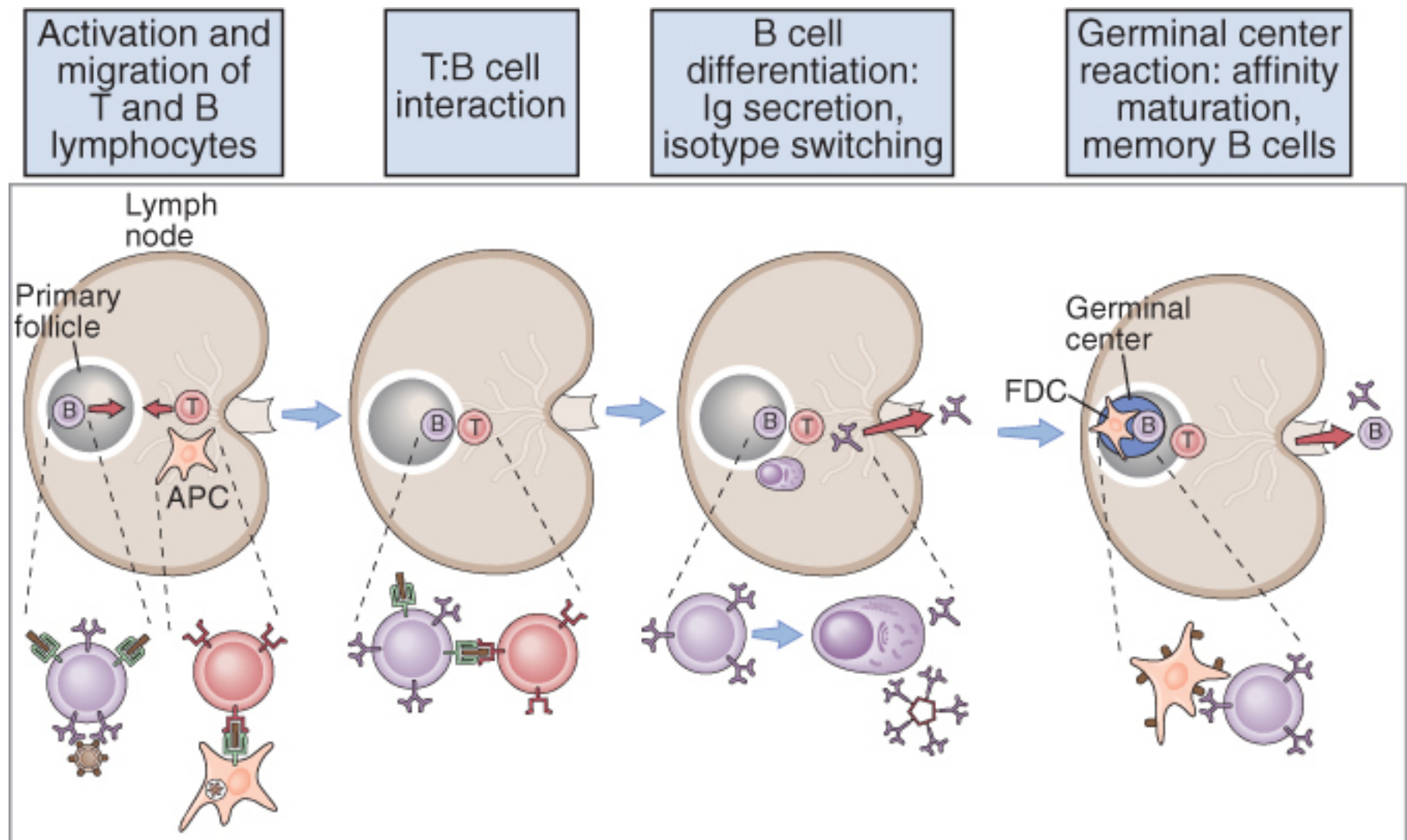
- proteins
- Lymph nodes
- estímulo de maturação
- estímulo de troca de Ig

- Multivalent antigens
- Different chemical compounds
- spleen

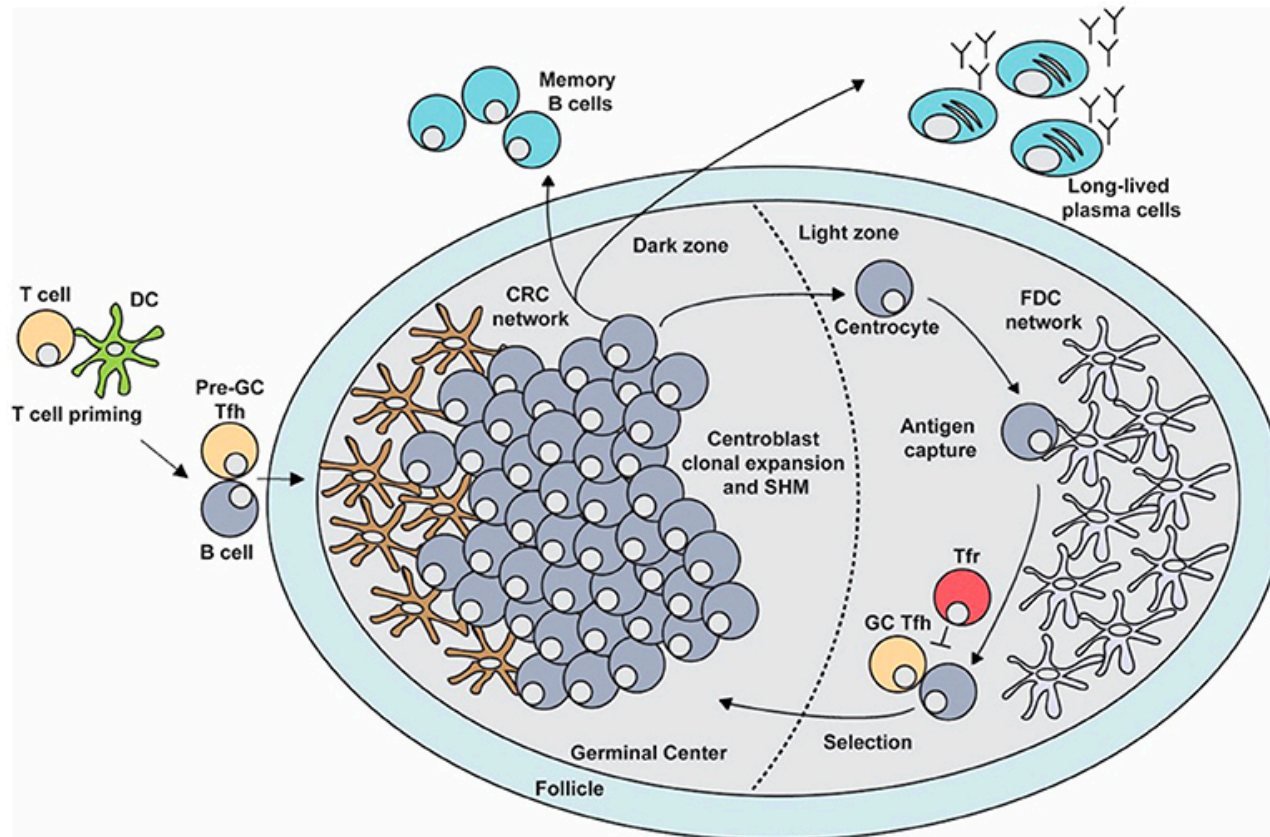
T independent activation



- Dynamics of T dependent activation

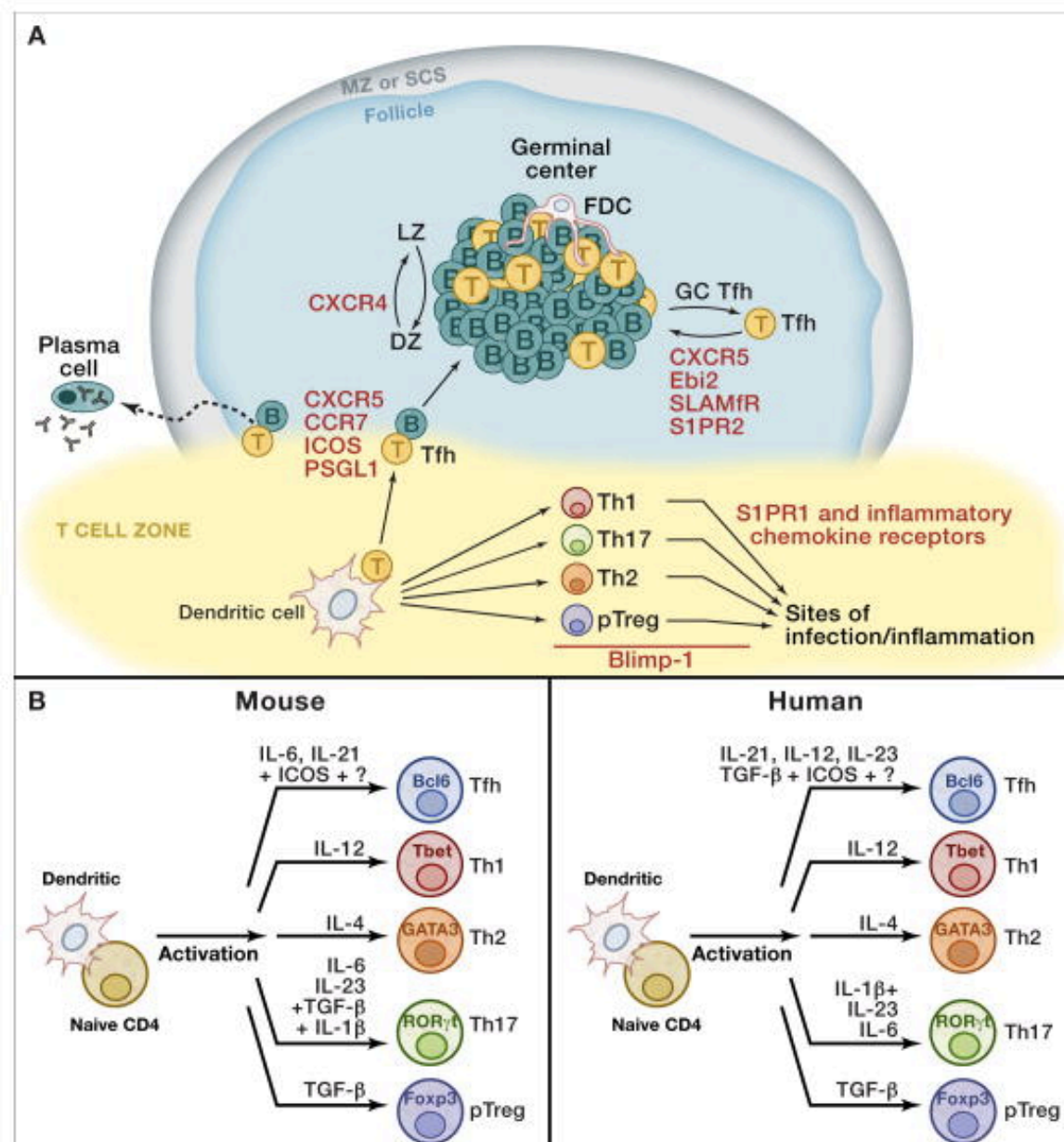


- Dynamics of T dependent activation

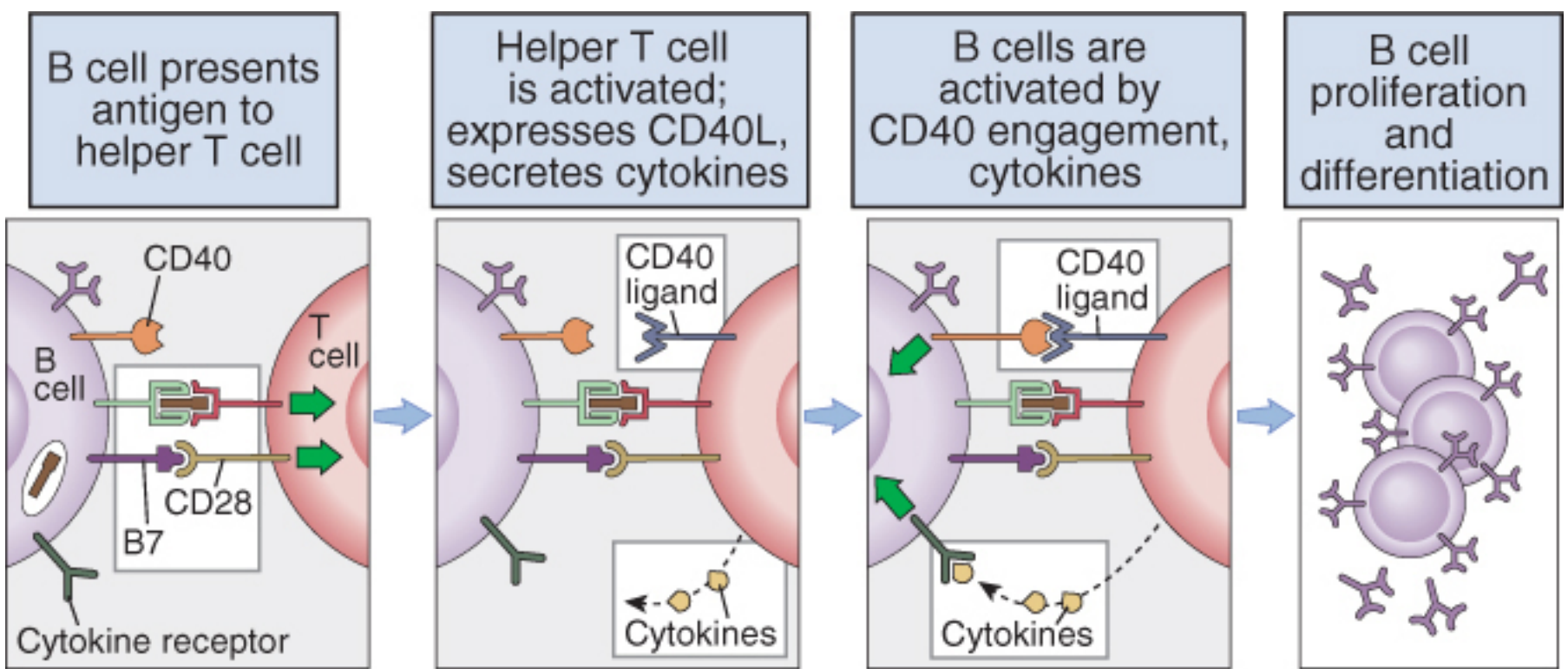


Secondary lymphoid organ

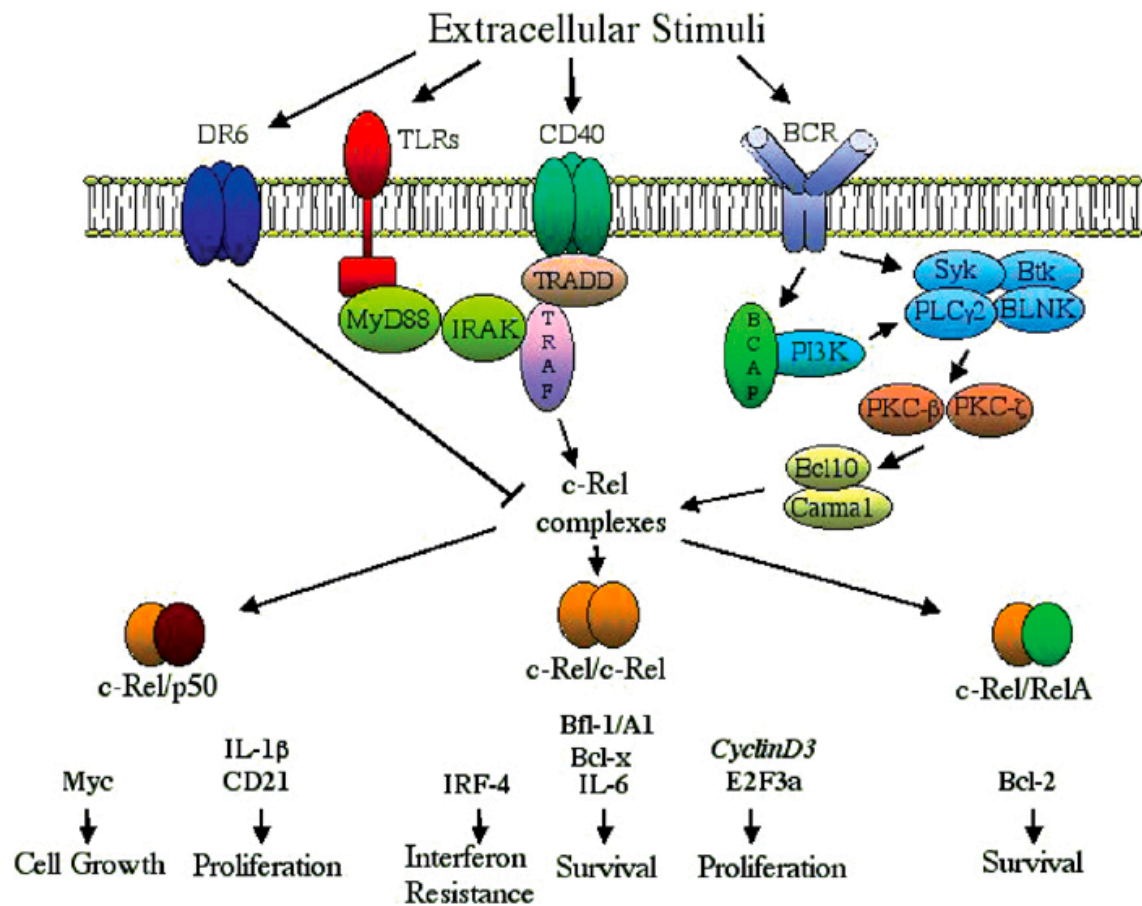
- Thf T cells – follicular helper T cells



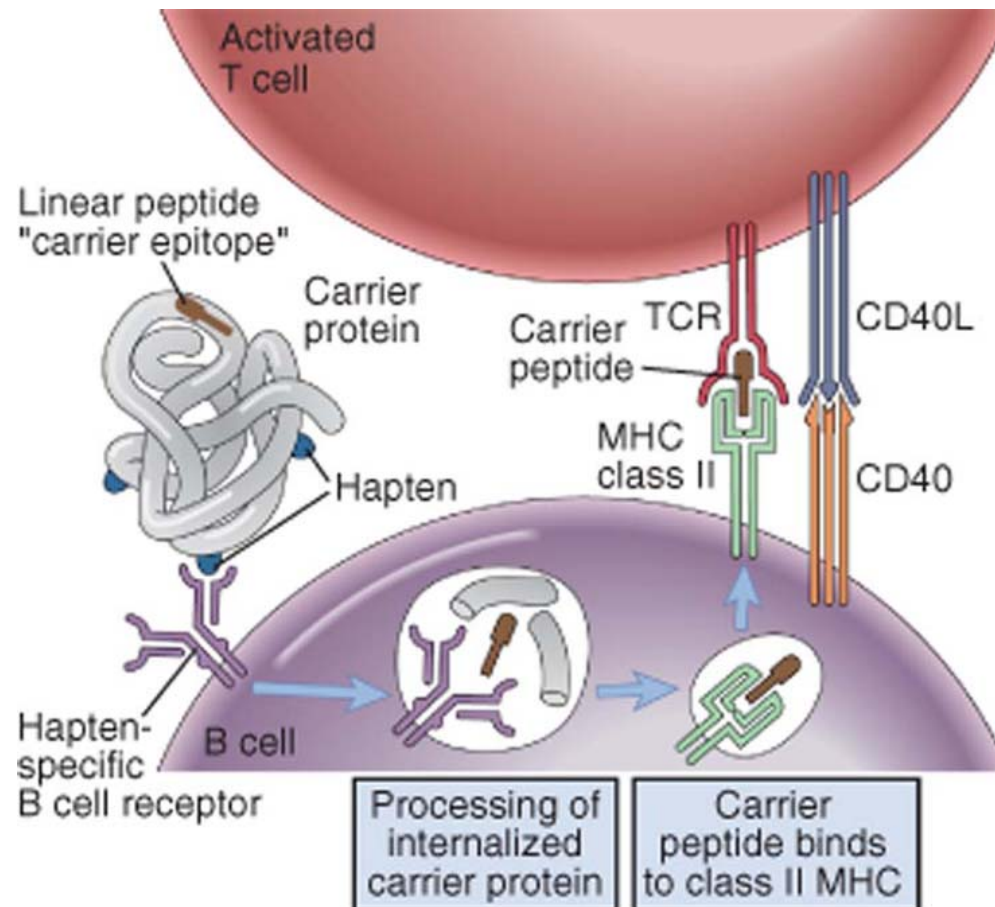
- The role of CD40/CD40L



- The role of CD40/CD40L

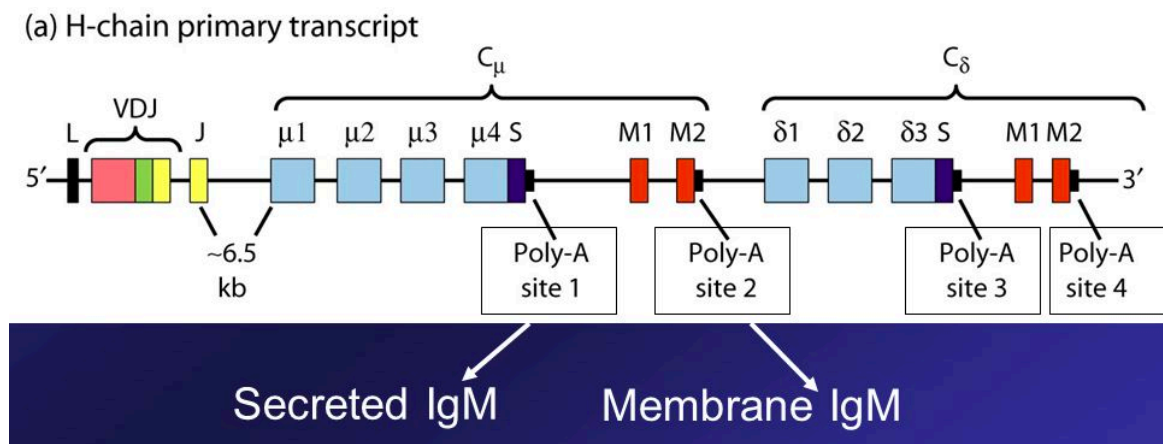
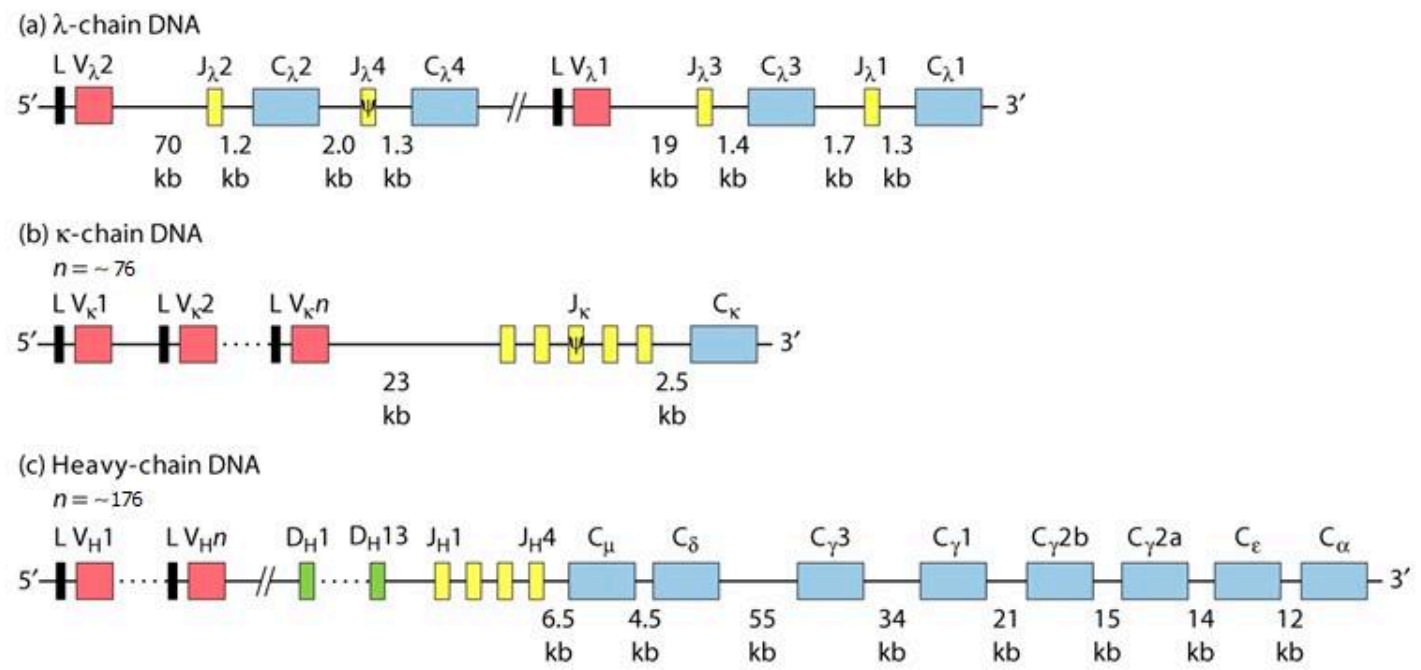


Haptens

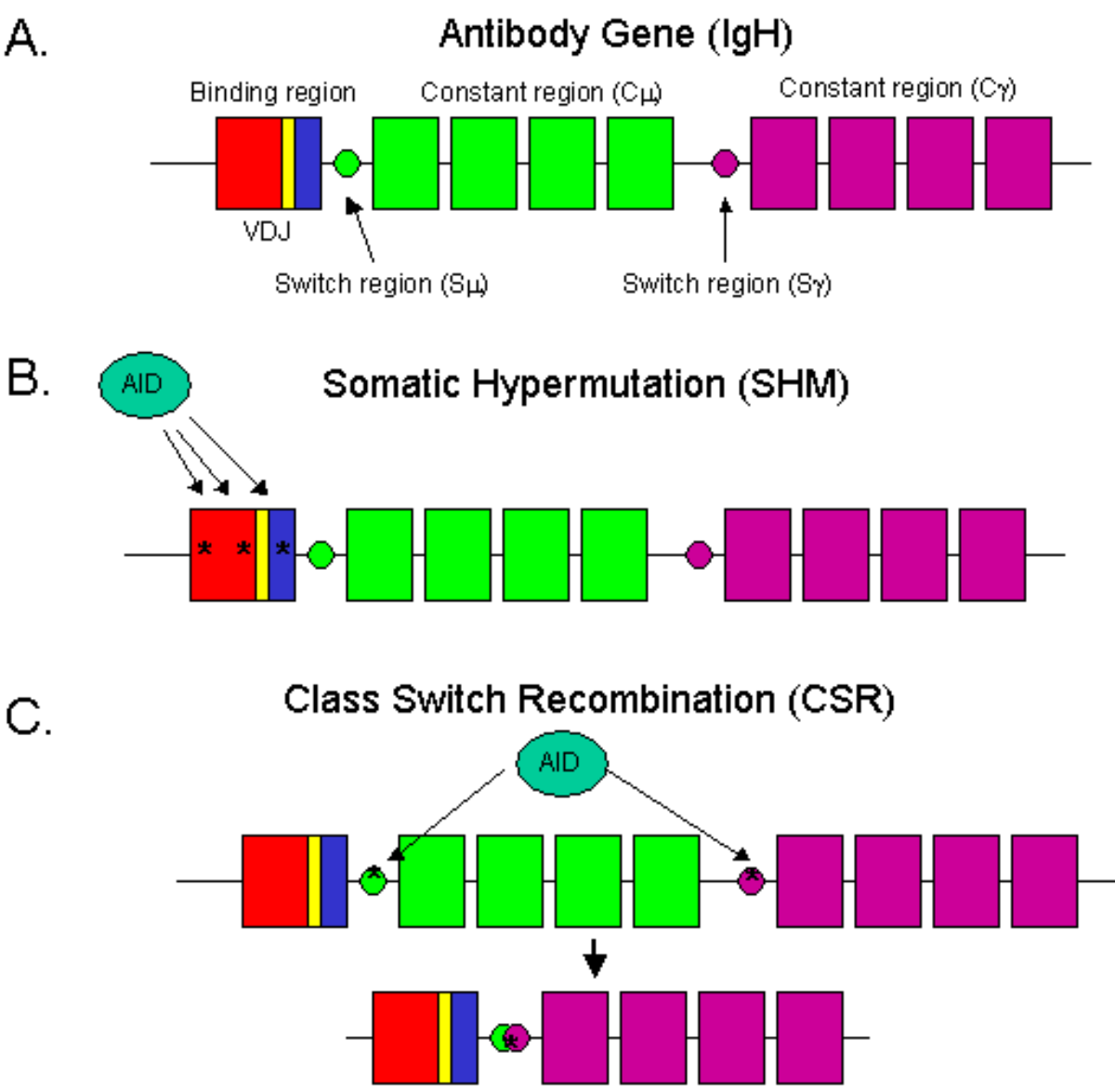


Abbas et al: Cellular and Molecular Immunology, Updated 6th Edition.
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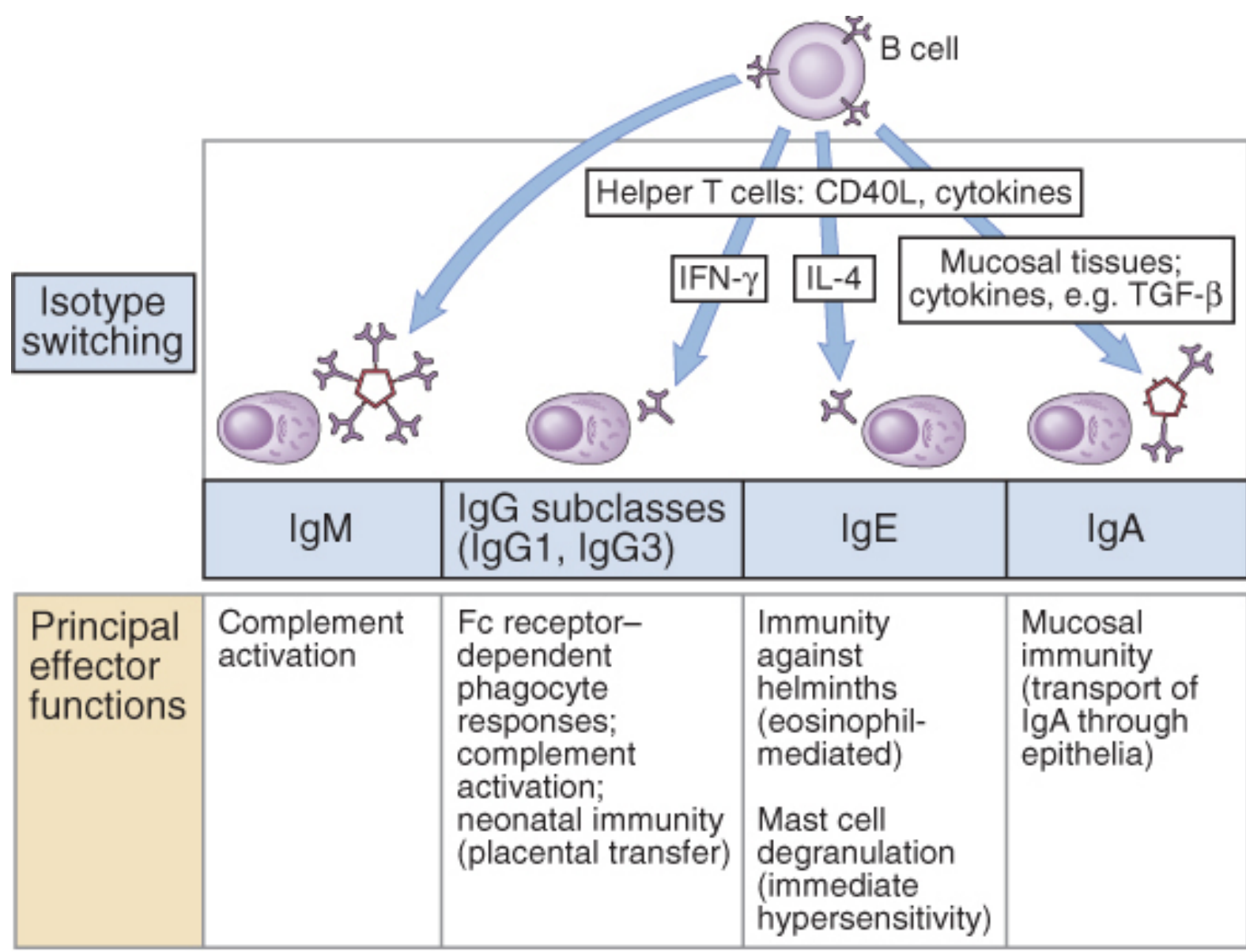
- Organization of the immunoglobulin locus and constant regions



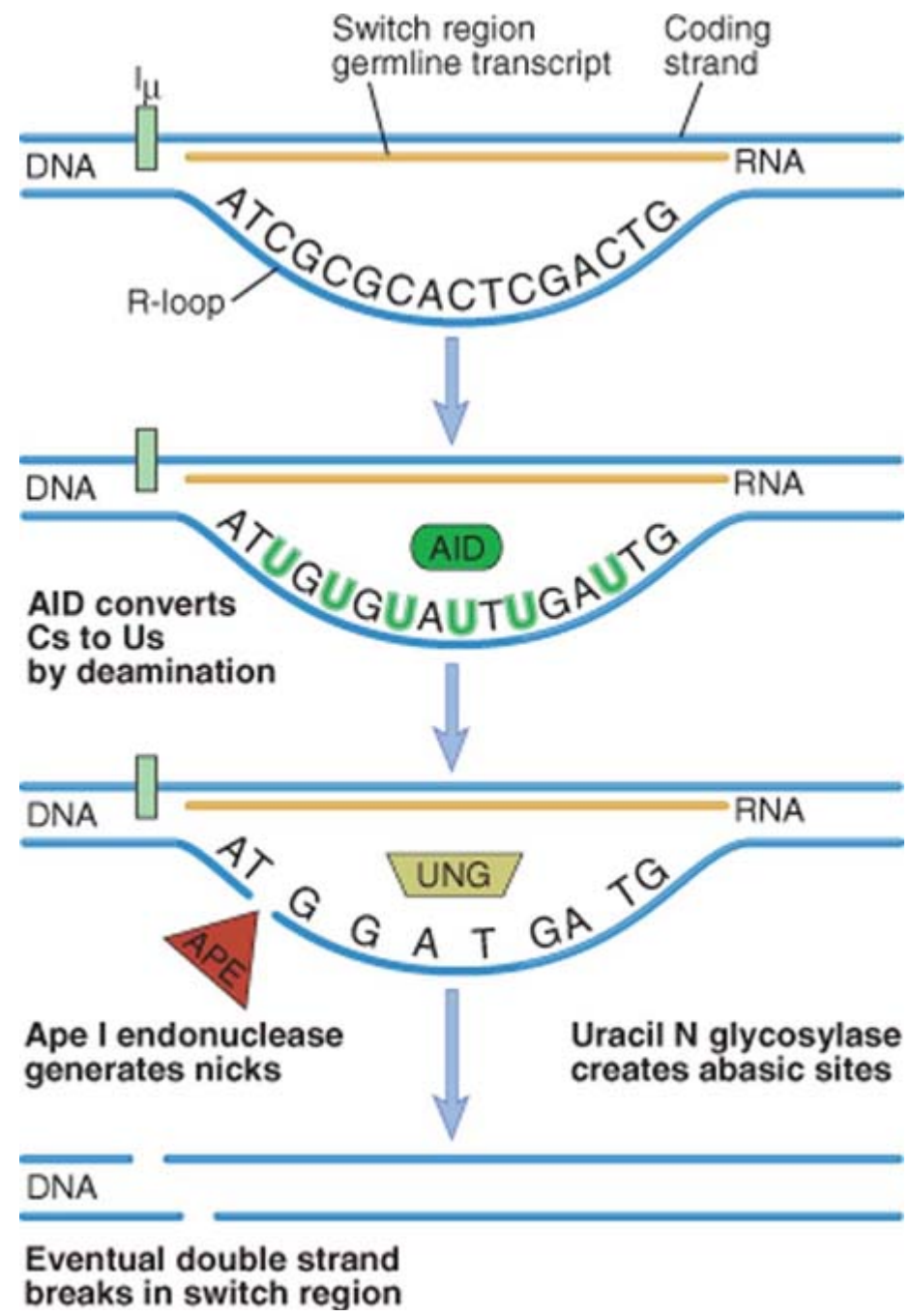
- Isotype switching



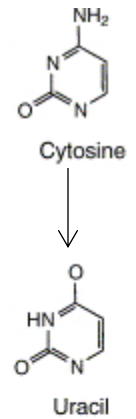
- Isotype switching – the role of cytokines



- Affinity maturation



Activation
Induced
Cytidine
deaminase



https://www.youtube.com/watch?v=qGsyBwDVnTU&list=PLS_8RsEvYc3XEoHIXgrhg3uEY6WFc9DtL&index=3

- Affinity maturation

