

Post-Module Assessment

[Click here](#) to take the online assessment after taking the course.

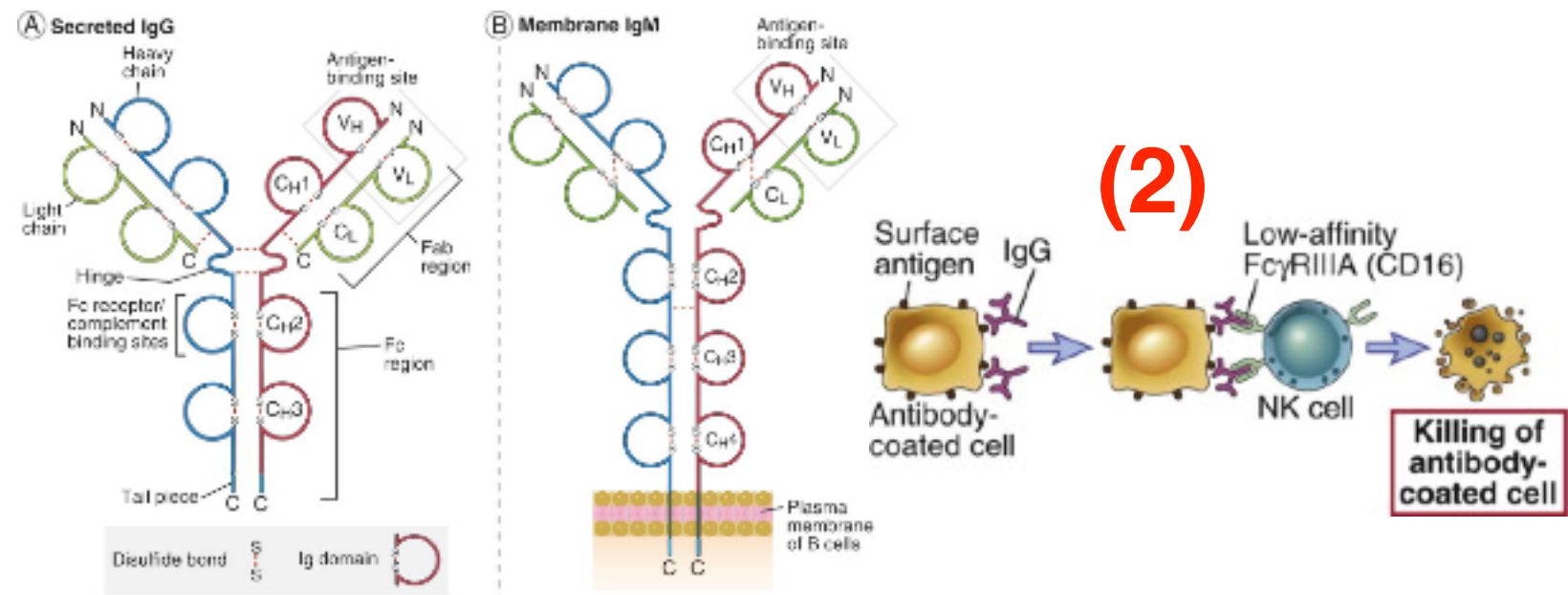
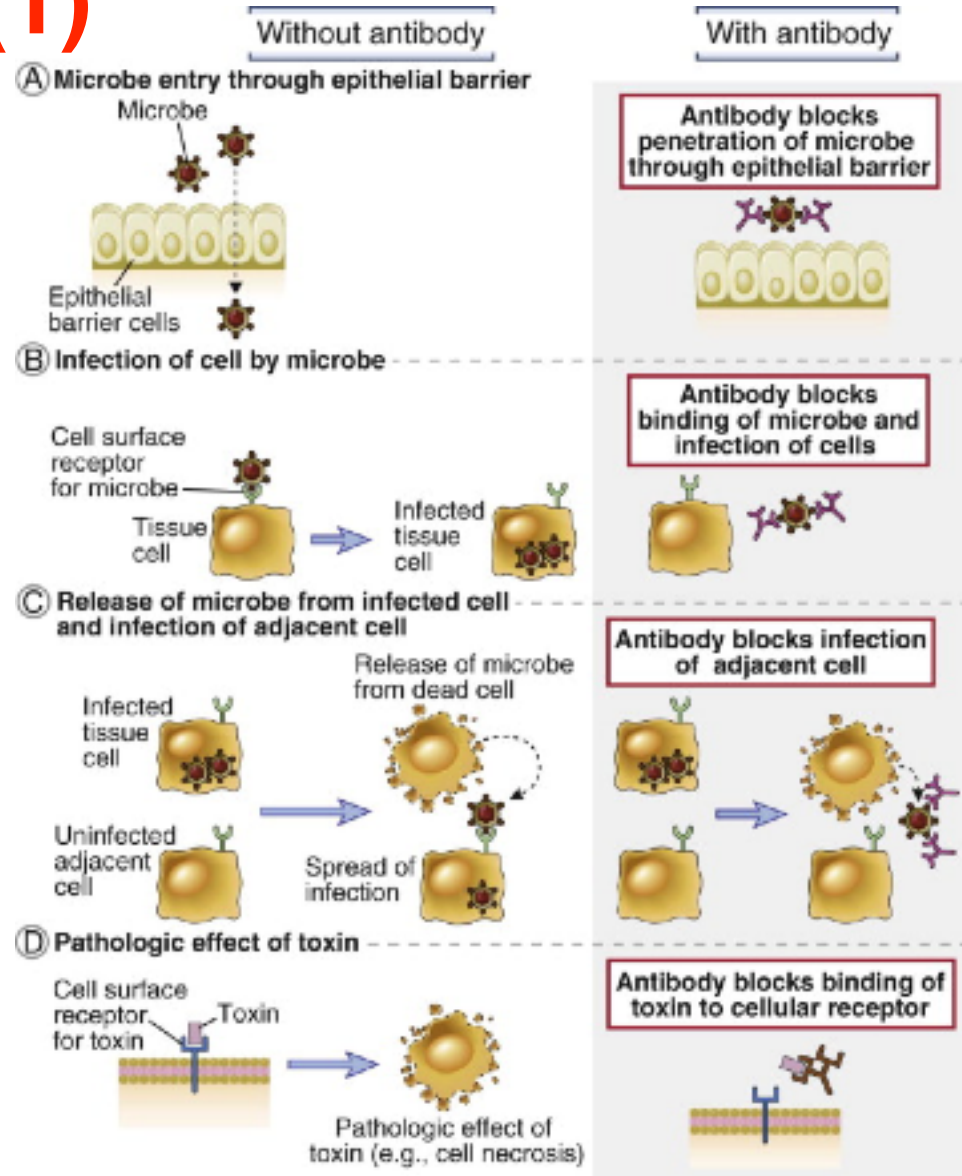
Then, [click here](#) to take the post-module survey (also required).

Thank you!

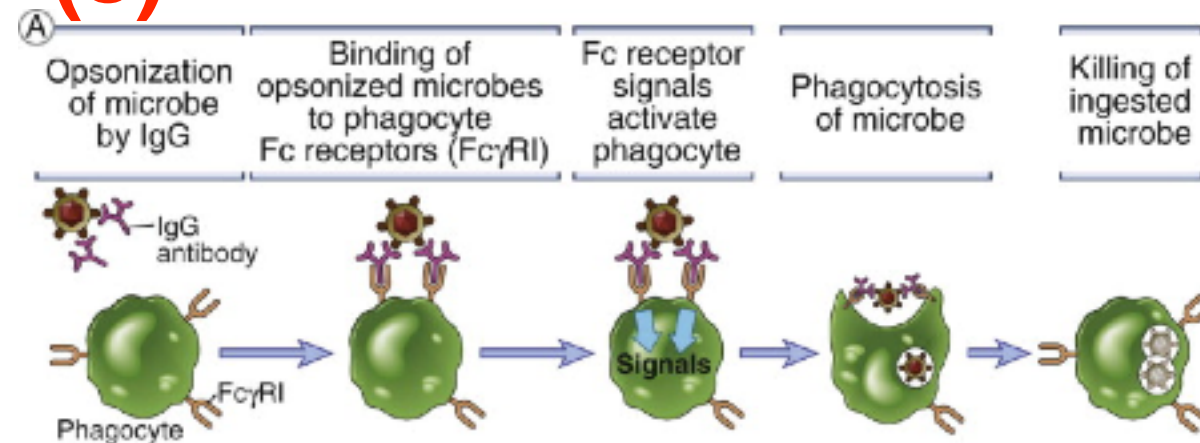
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What do antibodies do?

(1)



(3)



In response to specific antigen, activated B cells secrete antibodies (Abs) specific for that antigen, mediating humoral immunity. Abs can then work in several ways to enhance the effectiveness of the immune response.

(1) Ab can directly **neutralize** a toxin or pathogen by binding and blocking an important site either for toxin function or for infection of host cells. This occurs independent of the Fc region of the antibody.

(2) Ab can target a cell or pathogen for direct killing by macrophages, neutrophils or NK cells, via a process known as **antibody-dependent cytotoxicity (ADCC)**. This occurs via Fc recognition.

(3) Ab can **opsonize** a target Ag or pathogen, making phagocytosis much more efficient. In this case, the Ab-bound Ag/pathogen is efficiently engulfed by phagocytes expressing specific receptors for the constant region of Ig (these receptors are known as Fc receptors (FcR) and are specific for each Ig isotype).

(4) (not shown) Ab-bound antigen can activate the complement cascade that can then either a) promote opsonization via interaction with complement receptors expressed on phagocytes, b) promote an inflammatory response that recruits additional leukocyte effector cells, or c) directly induce the lysis of pathogens via the generation of the membrane attack complex, which creates pores in microbial cell membranes.

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If you would like to learn more or review any particular topic, the links below will take you to a text-based review of these concepts, or to the correlating video. You may also skip ahead to the post-module assessment.

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[What do antibodies do?](#)

[Why are there different isotypes?](#)

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[How do B cells develop?](#)

[How do B cells become antigen-specific?](#)

[Video 3 of 5 B Cell Activation](#)

[How are B cells activated?](#)

[How do B cells differentiate?](#)

[How do B cells change the antibody isotype?](#)

[How do B cells acquire memory?](#)

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[Video 5 of 5 Immunodeficiencies](#) [What happens if something goes wrong?](#)

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