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Antibodies

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Synonyms

[Immunoglobulins](#)

Definition (and Description)

Antibodies are proteins secreted by white blood cells (B lymphocytes). Their task is to circulate in the body and tag, destroy, or neutralize bacteria, viruses, or other harmful or foreign materials (antigens). They do this by opsonizing or coating foreign materials which marks them for destruction or neutralization.

Antibodies are also called immunoglobulins (Ig), which are present on the surface of B cells and act as receptors for foreign materials.

Immunoglobulins can be classified into several classes, IgA, IgE, IgM, IgG, and IgD, some of which have further subtypes. Each type of antibody has a range of different immune functions. IgA is found at the mucosal surfaces (e.g., mouth, nose, gastrointestinal tract) and can be measured in saliva. IgM is the first type of antibody produced in response to a novel foreign material. IgG is the most common antibody found in the body.

Cross-References

- [Antigens](#)
- [Immunoglobulins](#)

References and Further Readings

- Goldsby, R. A., Kindt, T. J., Osborne, B. A., & Kuby, J. (2003). *Immunology* (5th ed.). New York: W.H. Freeman.
- Janeway, C. A. J., Travers, P., Walport, M., & Schlomchik, M. J. (2005). *Immunobiology: The immune system in health and disease* (6th ed.). London: Taylor and Francis.