

A molecule that can react with the immune system.

Does not necessarily induce an immune response.

Examples include food particles, dust, and microorganisms.

A substance capable of inducing a specific immune response.

Leads to the formation of antibodies or activation of white blood cells.

All immunogens are antigens, but not all antigens are immunogens.

Partial antigens that cannot induce an immune response on their own.

Require coupling with a larger carrier molecule to become immunogenic.

Examples include certain antibiotics and analgesics.

Also known as antigenic determinants.

Composed of small sequences of amino acids or monosaccharides.

The specific part of the antigen that is recognized by antibodies.

Substances that enhance the immune response to an immunogen.

Can include inorganic compounds, mineral oils, and bacterial products.

Help prolong the presence of antigens in the body and activate immune cells.

Foreignness: The more foreign a substance, the more immunogenic it is.

Molecular Weight: Larger molecules (over 6000 daltons) are generally more immunogenic.

Chemical Structure Complexity: Heteropolymers are more immunogenic than homopolymers.

Dosage: The amount of immunogen can influence the immune response.

Route of Administration: Different routes (subcutaneous, intravenous, intragastric) affect the immune response.

Individual Genetic Differences: Genetic makeup can influence how an immune response is mounted.

Enhance the immune response when mixed with immunogens.

Examples include alum and mineral oil.

Support the production of cytokines and activate macrophages and lymphocytes.