

SECRETED FORM OF IMMUNOGLOBULIN M (SIgM)

Summary

Immunoglobulins of class M are pentameric proteins produced by B lymphocytes. Among the IgM's a secretory form (SIgM) is distinguished, which in turn may occur in natural and immune SIgM forms. Secretory immunoglobulin M class occurs mainly in the blood and is involved in B cell homeostasis, bacterial, viral, fungal and parasitic infections, as well as in inflammatory processes, autoimmune diseases, and atherosclerosis. SIgM binds antigens, activates the process of phagocytosis and antibody-dependent cell cytotoxicity. It is also an important component of acquired immunity, because it appears as the first in re-

sponse to an antigen. In addition, SIgM supports the guiding apoptotic cells by macrophages recruitment of complement component C1q to streamline the process of elimination of apoptotic cells. It should be noted that research carried out so far on this class of immunoglobulins indicates that the presence of SIgM, especially in the natural form, does not always produce a positive effect on macroorganism. This was observed in the case of autoimmune diseases and inflammatory conditions. However, it is the important and multifunctional protein having the ability to bind to a microbial cells infecting organism.