

Immunoglobulin

An antibody (AB), also known as an immunoglobulin (Ig), is a large, Y-shaped protein produced by plasma cells that is used by the immune system to identify and neutralize pathogens such as bacteria and viruses. The antibody recognizes a unique molecule of the harmful agent, called an antigen, via the variable region.

Each tip of the "Y" of an antibody contains a paratope that is specific for one particular epitope (similarly analogous to a key) on an antigen, allowing these two structures to bind together with precision. Using this binding mechanism, an antibody can tag a microbe or an infected cell for attack by other parts of the immune system or can neutralize its target directly (for example, by blocking a part of a microbe that is essential for its invasion and survival). The ability of an antibody to communicate with the other components of the immune system is mediated via its Fc region (located at the base of the "Y"), which contains a conserved glycosylation site involved in these interactions.

The production of antibodies is the main function of the humoral immune system.

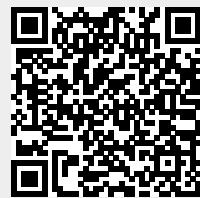
Immunoglobulin therapy

- Immunoglobulin G4-related ophthalmic disease with orbital deep hemangioma: A case report
- CD70 CAR-T cells empowered by TS-2021 through ex vivo transduction show potent antitumor efficacy against glioblastoma
- The hotspots and publication trends in glioblastoma and CAR-T immunotherapy: A bibliometric analysis
- The safety and feasibility of multiple intrathecal injections of allogenic NK cells in pediatrics with refractory/recurrent brain tumors
- Enhancing mesothelin CAR T cell therapy for pancreatic cancer with an oncolytic herpes virus boosting CAR target antigen expression
- An adolescent patient with anti-N-methyl-D-aspartate receptor encephalitis with motor aphasia as the first symptom and complicated by peripheral nerve damage: A case report and literature review
- Simultaneous development of Guillain-Barre syndrome and bacterial meningitis as complications of pneumonia caused by *Staphylococcus aureus*: a case report
- Nuciferine ameliorates blood-brain barrier disruption post-ischemic stroke via inhibiting the JAK2/STAT3 pathway

Immunoglobulin therapy is the use of a mixture of antibodies (normal human immunoglobulin or NHIG) to treat several health conditions.

These conditions include primary immunodeficiency, immune thrombocytopenic purpura, chronic inflammatory demyelinating polyneuropathy, Kawasaki disease, certain cases of HIV/AIDS and measles, Guillain-Barré syndrome, and certain other infections when a more specific immunoglobulin is not available.

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