

Monoclonal Antibodies in Endocrine Research 9780890046876 1981 Raven Press, 1981

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Winter, 1982. Monoclonal antibody techniques in endocrinology. 27. Lymphocytes myeloma cells. Of importance to endocrine research, it has been more difficult to produce monoclonal antibodies to soluble antigens. Thus, thousands of colonies may need to be studied to obtain an antibody with the desired specificity and affinity. This creates the need for microtiter semiautomated assays. Many of the assays to detect monoclonal antibodies are performed in 96-well microtiter plates and utilize simple devices (multichannel pipettes, harvesting frames) to semiautomate the assays (13). Standard precipitation assays can easily be performed in such plates as long as the incubation volumes are I Recently, monoclonal antibodies (MA) have gained popularity as therapeutic agents for the treatment of autoimmune disorders. These antibodies target proinflammatory cytokines, as well as T and B cells potentially involved in the pathogenesis of such conditions. In the present work we attempt to give a systematic description of available therapeutic MA, highlight their key mechanisms of action and pinpoint their adverse effects. We believe that MA that are capable of recognizing and eliminating pathogenic T and B-cell clones hold the most promise for medical application as biologics. Detection of The monoclonal antibodies produced by using mice are quite suitable for in vitro use. However, their administration to humans is associated with immunological complications, since they are foreign to human body. Production of human monoclonal antibodies is preferred. However, B-cells on their own, cannot grow in culture. This limitation can be overcome by transforming B-lymphocytes with Epstein-Bar virus (EBV). Some of the EBV-transformed cells can grow in culture and produce monoclonal antibodies. Unfortunately, the yield of MAb is very low by this approach. SCID mouse for producing human MAbs Monoclonal antibodies are antibodies that are made by identical immune cells that are all clones of a unique parent cell. Monoclonal antibodies have many practical applications in research, medical diagnosis and therapy. Advances in medical research have led to the identification of cells and molecules that are involved in the pathogenesis of many diseases. Monoclonal antibodies, because of their exquisite specificity, provide a means of targeting these cells and molecules. A number of monoclonal antibodies are used therapeutically. Monoclonal Antibodies: Methods and Protocols, Second Edition expands upon the previous edition with current, detailed modern approaches to isolate and characterize monoclonal antibodies against carefully selected antigens. Monoclonal Antibodies. Methods and Protocols. Editors. (view affiliations). Vincent Ossipow. Nicolas Fischer. Book. 201 Citations.