HUMAN ANTIBODIES THAT BIND LYMPHOCYTE ACTIVTION GENE-3 (LAG-3), AND USES THEREOF

Abstract

The present disclosure provides isolated monoclonal antibodies that specifically bind to LAG-3 with high affinity, particularly human monoclonal antibodies. Preferably, the antibodies bind human LAG-3. In certain embodiments, the antibodies bind both human and monkey LAG-3 but do not bind mouse LAG-3. The invention provides anti-LAG-3 antibodies that can inhibit the binding of LAG-3 to MHC Class II molecules and that can stimulate antigen-specific T cell responses. Nucleic acid molecules encoding the antibodies of the invention, expression vectors, host cells and methods for expressing the antibodies of the invention are also provided. Immunoconjugates, bispecific molecules and pharmaceutical compositions comprising the antibodies of the invention are also provided. This disclosure also provides methods for detecting LAG-3, as well as methods for treating stimulating immune responses using an anti-LAG-3 antibody of the invention. Combination therapy, in which an anti-LAG-3 antibody is co-administered with at least one additional immunostimulatory antibody, is also provided.

[Figure 1A]