

ANTI-MUC16 (MUCIN 16) ANTIBODIES

ABSTRACT

Mucin 16 (MUC16) is highly expressed in ovarian cancer and expression on cancer cells is shown to protect tumor cells from the immune system. The present invention provides novel full-length human IgG antibodies that bind to human and MUC16 (monospecific antibodies). The present invention also provides novel bispecific antibodies (bsAbs) that bind to both MUC16 and CD3 and activate T cells via the CD3 complex in the presence of MUC16-expressing tumors. According to certain embodiments, the present invention provides bispecific antigen-binding molecules comprising a first antigen-binding domain that specifically binds human and monkey CD3, and a second antigen-binding molecule that specifically binds human and monkey MUC16. In certain embodiments, the bispecific antigen-binding molecules of the present invention are capable of inhibiting the growth of tumors expressing MUC16. The bispecific antigen-binding molecules of the invention are useful for the treatment of diseases and disorders in which an upregulated or induced MUC16-targeted immune response is desired and/or therapeutically beneficial. For example, the bispecific antibodies of the invention are useful for the treatment of various cancers, including ovarian cancer. The present invention also includes anti-MUC16 antibody drug conjugates which inhibit tumor growth in vivo. In some embodiments, the anti-MUC16 antibodies are useful in diagnostic methods for identifying the presence of MUC16 in tissue and/or plasma samples.

[No Figure]