

CLAIMS

1. An isolated antibody or antigen-binding fragment thereof that binds within one or more of the five membrane-proximal SEA domains of human MUC 16 (SEQ ID NO: 1899), wherein the antibody or antigen-binding fragment binds within residues 14237 to 14290 of SEQ ID NO: 1899, and comprises complementarity determining regions HCDR1, HCDR2, HCDR3, LCDR1, LCDR2 and LCDR3 comprising the amino acid sequences of SEQ ID NOs: 20, 22, 24, 28, 30, and 32, respectively.
2. The isolated antibody or antigen-binding fragment thereof of claim 1, comprising a heavy chain variable region comprising the amino acid sequence of SEQ ID NO: 18, and a light chain variable region comprising the amino acid sequence of SEQ ID NO: 26.
3. A method of detecting MUC16 in a biological sample that has been obtained from a subject, comprising: detecting whether MUC16 is present in the biological sample by contacting the biological sample with an antibody or antigen-binding fragment thereof of claim 1 or 2, and detecting binding between MUC16 and the antibody or antigen-binding fragment.
4. The method of claim 3, wherein the biological sample is a tissue or fluid sample selected from plasma, serum, ascites, ovary, uterus, cervix, liver, bladder, pancreas, stomach, small or large intestine, gall bladder, breast, lung, kidney, salivary, and lacrimal glands, or any epithelioid malignancy thereof.