

CLAIMS

1. An isolated antibody or antigen-binding fragment, wherein the antibody or antigen-binding fragment is capable of binding to mesothelin and comprises heavy chain complementarity determining regions comprising amino acid sequences of SEQ ID NO: 1 (HCDR1), SEQ ID NO: 2 (HCDR2), and SEQ ID NO: 3 (HCDR3); and light chain complementarity determining regions comprising amino acid sequences of SEQ ID NO: 4 (LCDR1), SEQ ID NO: 5 (LCDR2), and SEQ ID NO: 6 (LCDR3), as defined by the Kabat numbering system; or heavy chain complementarity determining regions comprising amino acid sequences of SEQ ID NO: 7 (HCDR1), SEQ ID NO: 8 (HCDR2), and SEQ ID NO: 9 (HCDR3); and light chain complementarity determining regions comprising amino acid sequences of SEQ ID NO: 10 (LCDR1), SEQ ID NO: 11 (LCDR2), and SEQ ID NO: 12 (LCDR3), as defined by the IMGT numbering system.

2. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment comprises a heavy chain variable region comprising the amino acid sequence of SEQ ID NO: 13, and a light chain variable region comprising the amino acid sequence of SEQ ID NO: 14.

3. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment comprises a heavy chain comprising the amino acid sequence of SEQ ID NO: 17, and a light chain comprising the amino acid sequence of SEQ ID NO: 18.

4. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment is conjugated to a therapeutic agent.

5. The antibody or antigen-binding fragment of claim 4, wherein the therapeutic agent is eribulin.

6. A pharmaceutical composition comprising the antibody or antigen-binding fragment of claim 1, and a pharmaceutically acceptable carrier.