(h6) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 211 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 164 and a constant region having the amino acid sequence of SEQ ID NO: 60; and a common antibody L chain having the amino acid sequence of SEQ ID NO: 223.

In another aspect, the present invention refers to a pharmaceutical composition comprising the bispecific antibody of the present invention and a pharmaceutically acceptable carrier.

The present disclosure also provides the following:

[1] A multispecific antigen-binding molecule that comprises:

CLAIMS

1. A bispecific antibody of any one of (h1) to (h6) below:

(h1) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 211 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 142 and a constant region having the amino acid sequence of SEQ ID NO: 60; and a common antibody L chain having the amino acid sequence of SEQ ID NO: 223;

(h2) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 206 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 142 and a constant region having the amino acid sequence of SEQ ID NO: 60; and a common antibody L chain having the amino acid sequence of SEQ ID NO: 223;

(h3) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 206 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 164 and a constant region having the amino acid sequence of SEQ ID NO: 60; and a common antibody L chain having the amino acid sequence of SEQ ID NO: 223;

(h4) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 206 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 168 and a constant region having the amino acid sequence of SEQ ID NO: 60; and a common antibody L chain having the amino acid

sequence of SEQ ID NO: 223;

(h5) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 206 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 168 and a constant region having the amino acid sequence of SEQ ID NO: 62; and a common antibody L chain having the amino acid sequence of SEQ ID NO: 223; and

(h6) a bispecific antibody having an antibody H chain having glypican 3-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 211 and a constant region having the amino acid sequence of SEQ ID NO: 61; an antibody H chain having T-cell receptor complex-binding activity that comprises an antibody H-chain variable region having the amino acid sequence of SEQ ID NO: 164 and a constant region having the amino acid sequence of SEQ ID NO: 60; and a common antibody L chain having the amino acid sequence of SEQ ID NO: 223.

2. The bispecific antibody of claim 1, further comprising a common L chain constant region having the amino acid sequence of SEQ ID NO: 63.

3. A pharmaceutical composition comprising the bispecific antibody of claim 1 or 2 and a pharmaceutically acceptable carrier.

CYTOTOXICITY-INDUCING THERAPEUTIC AGENT

ABSTRACT

Novel multispecific antigen-binding molecules maintaining excellent cellular cytotoxicity and high stability, which comprise a domain that contains an antibody variable region having glypican 3-binding activity and a domain that contains an antibody variable region having T-cell receptor complex-binding activity, were discovered. Since the molecules of the present invention show a strong cytotoxicity against cells and tissues expressing glypican 3, it is possible to produce novel pharmaceutical compositions for treating or preventing various cancers.

[No Suitable Figure]