

CLAIMS

1. A conjugate comprising an isolated antigen-binding protein which binds claudin-6 or antigen-binding fragment thereof, a cytotoxic agent or a chemotherapeutic agent and a linker, wherein the antigen-binding protein is selected from (a) an antigen-binding protein comprising:
 - (i) an HC CDR1 comprising the amino acid sequence of FTFSXYX (SEQ ID NO: 455), wherein X at position 5 is N and X at position 7 is W;
 - (ii) an HC CDR2 comprising the amino acid sequence of IRLKXDXYAT (SEQ ID NO: 456), wherein X at position 5 is S and X at position 7 is N;
 - (iii) an HC CDR3 comprising the amino acid sequence of XDGPPSGX (SEQ ID NO: 457), wherein X at position 1 is N and X at position 8 is S;
 - (iv) an LC CDR1 comprising the amino acid sequence of EXIYSY (SEQ ID NO: 476), wherein X is N;
 - (v) an LC CDR2 comprising the amino acid sequence of XAK (SEQ ID NO: 477), wherein X at position 1 is N; and
 - (vi) an LC CDR3 comprising the amino acid sequence of QXHYXVPWT (SEQ ID NO: 454), wherein X at position 2 is H and X at position 5 is T; and

(b) an antigen-binding protein comprising the heavy chain (HC) CDR1-3 amino acid sequences of SEQ ID NOs: 23, 24, and 25, and the light chain (LC) CDR1-3 amino acid sequences of SEQ ID NOs: 20, 21, and 22,

wherein the linker is between the antigen-binding protein or fragment thereof and the cytotoxic agent or chemotherapeutic agent and the conjugate comprises VC-PAB-MMAE.
2. The conjugate according to claim 1, wherein the protein is an antibody or an antigen-binding antibody fragment.
3. The conjugate according to any one of the preceding claims, wherein the protein is a monoclonal antibody.

4. The conjugate according to any one of the preceding claims, wherein the protein is a human, humanized, or chimeric antibody.
5. The conjugate according to any one of the preceding claims, wherein the protein is a humanized antibody comprising the heavy chain variable domain sequence as provided in SEQ ID NO: 387 and light chain variable domain sequence as provided in SEQ ID NO: 389 or a variant that has at least 95%, 96%, 97%, 98% or 99% sequence identity along the full length of the referenced amino acid sequence.
6. A pharmaceutical composition comprising a conjugate according to any one of the preceding claims and a pharmaceutically acceptable carrier, diluent or excipient.
7. The conjugate according to any one of claims 1 to 5, or the pharmaceutical composition according to claim 6 for use in treating CLDN6-positive cancer, inhibiting CLDN6-positive tumor growth, reducing CLDN6-positive tumor size, or preventing the recurrence of CLDN6-positive cancer.
8. Use of the conjugate according to any one of claims 1 to 5 in the manufacture of a medicament for treating CLDN6-positive cancer, inhibiting CLDN6-positive tumor growth, reducing CLDN6-positive tumor size, or preventing the recurrence of CLDN6-positive cancer.