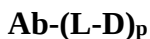


Claims

1. Antibody drug conjugate, its pharmaceutically acceptable salt, solvate or solvate of said salt, the antibody drug conjugate has the structure shown in Formula I,



Formula I

wherein:

Ab includes:

(a) the heavy chain variable region CDR1, CDR2, CDR3 and the light chain variable region CDR1, CDR2, CDR3, wherein, the sequence of the heavy chain variable region CDR1 is shown in SEQ ID NO: 42, the sequence of the heavy chain variable region CDR2 is shown in SEQ ID NO: 43, the sequence of the heavy chain variable region CDR3 is shown in SEQ ID NO: 44, the sequence of the light chain variable region CDR1 is shown in SEQ ID NO: 50, the sequence of the light chain variable region CDR2 is shown in SEQ ID NO: 51, and the sequence of the light chain variable region CDR3 is shown in SEQ ID NO: 52;

(b) a heavy chain variable region and a light chain variable region, wherein the sequence of the heavy chain variable region is shown in SEQ ID NO: 41, and the sequence of the light chain variable region is shown in SEQ ID NO: 49; and /or

(c) heavy chain and light chain, wherein the sequence of the heavy chain is shown in SEQ ID NO: 65, and the sequence of the light chain is shown in SEQ ID NO: 66;

L is MC-vc-PAB;

D is MMAE; and

p is 2.0-8.0.

2. The antibody drug conjugate according to claim 1, its pharmaceutically acceptable salt, solvate or solvate of said salt, wherein p is 2.0-7.0, 2.0-6.0, 2.0-5.0, 2.0-4.0, 3.0-7.0, 3.0-6.0, 3.0-5.0 or 3.0-4.0.

3. The antibody drug conjugate according to claim 1, its pharmaceutically acceptable salt, solvate or solvate of said salt, wherein p is 3.0-4.0.

4. The antibody drug conjugate according to claim 1, its pharmaceutically acceptable salt, solvate or solvate of said salt, wherein p is 3.0-3.8.

5. The antibody drug conjugate according to claim 1, its pharmaceutically acceptable salt, solvate or solvate of said salt, wherein p is 3.0, 3.4, 3.5 or 3.8.

6. The antibody drug conjugate according to claim 1, its pharmaceutically acceptable salt, solvate or solvate of said salt, wherein p is 3.8.

7. A composition comprising the antibody drug conjugate according to any one of claims 1-6, its pharmaceutically acceptable salt, solvate or solvate of said salt; optionally, further comprising at least one of the chemotherapeutic drugs, immunotherapy drugs and immunosuppressants known for treating tumors; or optionally, at least one pharmaceutically acceptable carrier, diluent or excipient.

8. Use of the antibody drug conjugate of any one of claims 1-6, its pharmaceutically acceptable salt, solvate or solvate of said salt or the composition of claim 7 in the preparation of medicaments for preventing and/or treating a disease associated with Claudin 18.2.

9. Use of the antibody drug conjugate, its pharmaceutically acceptable salt, solvate or solvate of said salt, or the composition of claim 8, wherein the disease associated with Claudin 18.2 is gastric cancer, adenocarcinoma of the esophagogastric junction, and pancreatic cancer.

10. Use of the antibody drug conjugate, its pharmaceutically acceptable salt, solvate or solvate of said salt, or the composition of claim 8, wherein the disease associated with Claudin 18.2 is gastric cancer.

11. The antibody drug conjugate of any one of claims 1-6, its pharmaceutically acceptable salt, solvate or solvate of said salt, or the composition of claim 7, for use in preventing and/or treating a disease associated with Claudin 18.2.

12. The antibody drug conjugate, its pharmaceutically acceptable salt, solvate or solvate of said salt, or the composition for use according to claim 11, wherein the disease associated with Claudin 18.2 is gastric cancer, adenocarcinoma of the esophagogastric junction, and pancreatic cancer.

13. The antibody drug conjugate, its pharmaceutically acceptable salt, solvate or solvate of said salt, or the composition for use according to claim 11, wherein the disease associated with Claudin 18.2 is gastric cancer.