Claims

1. An antibody or antigen-binding fragment thereof which

(i) binds to a peptide having the amino acid sequence TEDEVQSYPSKHDYV (SEQ ID NO: 5) or EVQSYPSKHDYV (SEQ ID NO: 6) and/or

(ii) binds to claudin 18.2 (CLDN18.2), wherein said antibody or antigen-binding fragment thereof binds to CLDN18.2 by binding at least to an epitope within CLDN18.2 having the amino acid sequence TEDEVQSYPSKHDYV (SEQ ID NO: 5) or EVQSYPSKHDYV (SEQ ID NO: 6)~~.~~; and which antibody or antigen-binding fragment thereof does not bind to claudin 18.1 (CLDN18.1) as expressed in lung tissue.

2. The antibody or antigen-binding fragment thereof of claim 1, wherein said CLDN18.2 is cell surface membrane-bound CLDN18.2.

3. The antibody or antigen-binding fragment thereof of claim 1 or 2, wherein said CLDN18.2 is present on cancer cells.

4. The antibody or antigen-binding fragment thereof of claim 3, wherein said cancer cells are CLDN18.2 expressing cancer cells.

5. The antibody or antigen-binding fragment thereof of claim 3 or 4, wherein said cancer cells are selected from the group consisting of gastric, esophageal, pancreatic, lung, ovarian, colon, hepatic, head-neck, and gallbladder cancer cells.

6. The antibody or antigen-binding fragment thereof of any one of claims 1 to 5 which does not bind to non-cancerous cells except stomach epithelial cells.

7. The antibody or antigen-binding fragment thereof of any one of claims 1 to 6 which does not bind to non-cancerous lung cells.

8. The antibody of any one of claims 1 to 5 which is a chimeric, human or humanized antibody.

9. The antibody of any one of claims 1 to 8, which is a monoclonal antibody.