

Claims

1. A humanised antibody or antibody binding fragment that binds PRL3.
2. The humanised antibody or antibody binding fragment of claim 1, wherein the antibody or antibody binding fragment contains a CH1 and a CH2 domain.
3. The humanised antibody or antibody binding fragment according to claim 1 which binds to an epitope comprising the amino acid sequence KAKFYN and/or to HTHKTR.
4. The humanised antibody or antibody binding fragment according to any one of the preceding claims, having the amino acid sequences i) to iii), or the amino acid sequences iv) to vi), or preferably the amino acid sequences i) to vi);

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|------|-------------------|---------------|
| i) | KASQSVEDDGENYMN | (SEQ ID NO:4) |
| ii) | AASNLES | (SEQ ID NO:5) |
| iii) | QQSNEDPFT | (SEQ ID NO:6) |
| iv) | GYTFTNYMH | (SEQ ID NO:1) |
| v) | WIYPGNVNTYYNEKFRG | (SEQ ID NO:2) |
| vi) | EEKNYPWFAY | (SEQ ID NO:3) |

or a variant thereof in which one, two or three amino acids in one or more of the sequences i) to vi) are replaced with another amino acid.

5. The humanised antibody, or antigen binding fragment, of any one of the preceding claims, having at least one light chain variable region incorporating the following CDRs:

LC-CDR1: KASQSVEDDGENYMN (SEQ ID NO:4)

LC-CDR2: AASNLES (SEQ ID NO:5)

LC-CDR3: QQSNEDPFT (SEQ ID NO:6)

6. The humanised antibody, or antigen binding fragment, of any one of the preceding claims, having at least one heavy chain variable region incorporating the following CDRs:

HC-CDR1: GYTFTNYMH (SEQ ID NO:1)

HC-CDR2: WIYPGNVNTYYNEKFRG (SEQ ID NO:2)

HC-CDR3: EEKNYPWFAY (SEQ ID NO:3)

7. An *in vitro* complex, optionally isolated, comprising an antibody, or antigen binding fragment, according to any one of the preceding claims bound to PRL3.
8. An antibody or antigen binding fragment comprising a heavy chain and a light chain variable region sequence as set out in Figure 7.
9. Use of a humanised antibody, antigen binding fragment according to any one of the preceding claims in the manufacture of a medicament for the treatment of cancer.
10. A humanised antibody or antibody binding fragment according to any one of the preceding claims for use in the treatment of cancer.
11. Use of a humanised antibody or antibody binding fragment according to claim 1 in the manufacture of a medicament for the treatment of cancer, wherein said use comprises that the humanised antibody or antibody binding fragment is to be administered to a patient.
12. The use according to claim 11, wherein the cancer is gastric cancer or metastasis of gastric cancer.
13. The use according to claim 11, wherein the humanised antibody or antibody binding fragment is to be administered intravenously.
14. The use according to claim 11, wherein the humanised antibody is to be administered at a location distant to the cancer to be treated.
15. The use according to claim 11, wherein said use comprises that the humanized anti-PRL3 antibody is to be administered to a patient with gastric cancer, wherein the patient has not previously received antimetabolite therapy for gastric cancer, or has not previously received antimetabolite therapy.
16. The use according to claim 15, wherein the antimetabolite therapy is 5-FU.
17. The use according to claim 11, wherein the patient has been determined not to have an impaired immune system.
18. An *in vitro* method comprising determining the cellular localisation of PRL3 in a cell, wherein expression of PRL3 at the cell surface indicates that the cell is cancerous.
19. The method of claim 18, wherein the expression of PRL3 at the cell surface is 2-fold increased as compared to a control cell.
20. The method of claim 18, wherein the individual is determined to have cancer, or the individual is selected for anti-cancer therapy if PRL3 is expressed at the cell surface.