Patent Claims

1. An antibody specifically binding to human CDCP1 comprising a variable heavy chain domain (VH) of SEQ ID NO:1 and a variable light chain domain (VL) of SEQ ID NO:2 of CUB4 antibody,
characterized in

a) being humanized and

b) comprising in said VH sequence:
a Lysine (K) at position 57 instead of Threonine (T), and a Valine (V) at position 60 instead of a Proline (P), all positions being numbered according to Kabat.

2. An antibody specifically binding to human CDCP1 comprising a variable heavy chain domain (VH) of SEQ ID NO:1 and a variable light chain domain (VL) of SEQ ID NO:2 of CUB4 antibody,
characterized in
a) being humanized and
b) comprising in said VL sequence:
a Leucine (L) at position 33 instead of Valine (V), and a Tryptophan (W) at position 47, all positions being numbered according to Kabat.

3. An antibody specifically binding to human CDCP1 comprising a variable heavy chain domain (VH) of SEQ ID NO:1 and a variable light chain domain (VL) of SEQ ID NO:2 of CUB4 antibody,
characterized in
a) being humanized and
b) comprising in said VH sequence:
a Lysine (K) at position 57 instead of Threonine (T) and a Valine (V) at position 60 instead of a Proline (P), and
c) comprising in said VL sequence:
a Leucine (L) at position 33 instead of Valine (V), and a Tryptophan (W) at position 47, all positions being numbered according to Kabat.

4. The humanized antibody according to claims 2 or 3, characterized in comprising in said VL sequence:

~~a Methionine (M) at position 21, all positions being numbered according to Kabat.~~

~~5. The humanized antibody according to claims 2, 3 or 4, characterized in comprising in said VL sequence:~~

~~a Glycine (G) or a Arginine (R) at position 24 instead of a Serine (S), and Alanine (A) at position 25 instead of a Valine (V) , all positions being numbered according to Kabat.~~

~~6. The humanized antibody according to claims 2, 3 or 4, characterized in comprising in said VL sequence:~~

~~an Arginine (R) at position 24 instead of a Serine (S), and Alanine (A) at position 25 instead of a Valine (V) , all positions being numbered according to Kabat.~~

~~7. The humanized antibody according to claims 2, 3 or 4, characterized in comprising in said VL sequence:~~

~~a Glycine (G) at position 24 instead of a Serine (S),and Alanine (A) at position 25 instead of a Valine (V) , all positions being numbered according to Kabat.~~

~~8. An antibody specifically binding to human CDCP1 characterized in comprising a variable heavy chain domain (VH) of SEQ ID NO:3.~~

~~9. An antibody specifically binding to human CDCP1 characterized in comprising a variable light chain domain (VL) of SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, or SEQ ID NO: 18.~~

Patent Claims

~~10~~1. An antibody specifically binding to human CDCP1 characterized in ~~An antibody specifically binding to human CDCP1 characterized in~~ comprising a variable heavy chain domain (VH) of SEQ ID NO:3, and

a light chain variable domain (VL) of ~~SEQ ID NO: 14,~~ SEQ ID NO: 15, or ~~SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22,~~ SEQ ID NO: 23~~, or SEQ ID NO: 24~~.

~~11. The antibody according to claim 10, characterized in that the heavy chain variable domain (VH) is SEQ ID NO:3. and the light chain variable domain (VL) is SEQ ID NO: 14.~~

~~12~~2. The antibody according to claim ~~10~~1, characterized in that the heavy chain variable domain (VH) is SEQ ID NO:3. and the light chain variable domain (VL) is SEQ ID NO: 15.

~~13~~3. The antibody according to claim ~~10~~1, characterized in that the heavy chain variable domain (VH) is SEQ ID NO:3. and the light chain variable domain (VL) is SEQ ID NO: 23.

~~14~~4. The antibody according to claims 1 to ~~13~~3, characterized in that said antibody is of human IgG1 subclass.

~~15~~5. The antibody according to claims 1 to ~~14~~4, characterized in that said antibody is glycosylated with a sugar chain at Asn297 whereby the amount of fucose within said sugar chain is 65 % or lower.

~~16~~6. A pharmaceutical composition comprising the humanized antibody according to claims 1 to ~~15~~5.

~~17~~7. The antibody according to claims 1 to ~~15~~5, for the treatment of cancer.

~~18~~8. Use of the antibody according to claims 1 to ~~15~~5, for the preparation of a medicament for the treatment of cancer.

~~19~~9. Nucleic acid encoding an the humanized antibody according to claims 1 to ~~15~~5.

~~20~~10. Expression vectors containing a nucleic acid according claim ~~19~~9, capable of expressing said nucleic acid in a prokaryotic or eukaryotic host cell.

~~21~~11. A prokaryotic or eukaryotic host cell comprising a vector according to claim ~~20~~10.

~~22~~12. A method for the production of a recombinant humanized antibody according to claims 1 to ~~15~~5, characterized by expressing a nucleic acid according to claim ~~19~~9 in a prokaryotic or eukaryotic host cell and recovering said antibody from said cell or the cell culture supernatant.

~~23~~13. An antibody obtained by the method of claim ~~22~~12.