Claims

1. A nucleic acid composition comprising a nucleic acid sequence or a plurality of nucleic acid sequences encoding a human anti-CD38 specific antibody comprising:
(i) an H-CDR1, H-CDR2 and H-CDR3 region that are in SEQ ID NO: 21, and an L-CDR1, L-CDR2 and L-CDR3 region that are in SEQ ID NO: 51;
(ii) a variable heavy chain of SEQ ID NO: 21, and a variable light chain of SEQ ID NO: 51; or
(iii) a variable heavy chain encoded by SEQ ID NO: 6, and a variable light chain encoded by SEQ ID NO: 36.

2. A nucleic acid composition comprising a nucleic acid sequence or a plurality of nucleic acid sequences encoding the antibody of claim 1, wherein the antibody is an IgG, preferably IgG1.

3. A vector composition comprising a vector or a plurality of vectors comprising the nucleic acid sequence or plurality of nucleic acid sequences of claims 1 and 2.

4. A cell comprising the vector composition of claim 3, wherein optionally the cell is a bacterial cell or a mammalian cell.

5. A pharmaceutical composition comprising the antibody encoded by the nucleic acid composition of claim 1 or 2 and a pharmaceutically acceptable carrier or excipient.

6. The use of the antibody encoded by the nucleic acid composition of claim 1 or 2 in the manufacture of medicament for the treatment of a haematological disease or an inflammatory disease**.**

7. The use of a pharmaceutical composition comprising the antibody encoded by the nucleic acid composition of claim 1 or 2 and a pharmaceutically acceptable carrier or excipient in the manufacture of medicament for the treatment of a haematological disease or an inflammatory disease.

8. The use of the antibody according to claim 6 or the use of the pharmaceutical composition according to claim 7, wherein said haematological disease is taken from the list of multiple myeloma, chronic lymphocytic leukemia, chronic myelogenous leukemia, acute myelogenous leukemia and acute lymphocytic leukemia.

9. The use of the antibody according to claim 6 or the use of the pharmaceutical composition according to claim 7, wherein said inflammatory disease is taken from the list of rheumatoid arthritis and systemic lupus erythematosus.

10. An *in vitro* method of inducing specific killing of tumor cells that express CD38, wherein said specific killing occurs by CD38 cross-linking, comprising the step of incubating said cells in

the presence of a sufficient amount of the antibody encoded by the nucleic acid composition of claim 1 or 2.

11. An *in vitro* method of detecting specific killing of tumor cells that express CD38, by CD38 cross-linking, comprising the steps of: (i) administering to a subject in need thereof an effective amount of the antibody encoded by the nucleic acid composition of claim 1 or 2 and (ii) detecting the specific killing activity of said antibodies in vitro..

12. A method of detecting the presence of CD38 in a tissue or a cell of minipig origin contacted with the antibody encoded by the nucleic acid composition of claim 1 or 2, comprising the step of *in vitro* detecting the specific binding of said antibody to said CD38 minipig cells, wherein said antibody is also able to specifically bind to CD38 of human origin, wherein optionally the CD38 of minipig origin is comprised within an isolated cell type selected from the group consisting of peripheral blood monocyte, erythrocyte, lymphocyte, thymocyte, muscle cell, cerebellum cell, pancreas cell, lymph-node cell, tonsil cell, spleen cell, prostate cell, skin cell and a cell of the retina.

13. A method of detecting CD38 in a CD38-expressing erythrocyte contacted with the antibody encoded by the nucleic acid composition of claim 1 or 2, comprising the step of *in vitro* detecting the specific binding of said antibody to said CD38-expressing erythrocytes, wherein said antibody is also able to specifically bind to human CD38 from a cell or tissue other than human erythrocytes, wherein optionally the antibody is also able to specifically bind to human CD38 from a cell that is a human lymphocyte.

14. A diagnostic composition comprising the antibody encoded by the nucleic acid composition of claim 1 or 2 and an acceptable carrier or excipient.