

In another aspect of the present disclosure, there is provided a mammalian cell transformed with the DNA molecule of the present disclosure described above and the DNA molecule of the present disclosure described above, which transformed mammalian cell is capable of expressing an antibody comprising two antibody heavy chains and two immunoglobulin light chains, in which the amino sequence of each of the two heavy chains is the sequence of SEQ ID NO:3 and the amino acid sequence of each of the two light chains is the sequence of SEQ ID NO:4.

In a further aspect of the present disclosure, there is provided a mammalian cell transformed with the DNA molecule of the present disclosure described above, which transformed mammalian cell is capable of expressing an antibody comprising two antibody heavy chains and two immunoglobulin light chains, in which the amino sequence of each of the two heavy chains is the sequence of SEQ ID NO:3 and the amino acid sequence of each of the two light chains is the sequence of SEQ ID NO:4.

Another aspect of the present disclosure includes a process for producing an antibody, which antibody comprises two antibody heavy chains and two immunoglobulin light chains, in which the amino sequence of each of the two heavy chains is the sequence of SEQ ID NO:3 and the amino acid sequence of each of the two light chains is the sequence of SEQ ID NO:4, and which process comprises: a) cultivating a mammalian cell of the present disclosure, as described above, under conditions such that the antibody is expressed, and b) recovering the expressed antibody. The present disclosure also includes an antibody obtainable by the process of the present disclosure as described immediately above.

The present disclosure includes methods of using the antibodies, particularly for treating autoimmune (AI) conditions, especially primary Sjögren's syndrome (pSS), Sjögren's Syndrome (SS), Systemic Lupus Erythematosus, Grave's disease, or type 1 diabetes, methods of preparing the antibodies, polynucleotides encoding the antibodies, vectors comprising the nucleotides for transforming host cells and for expressing the antibodies, host cells for expressing the antibodies, antibodies prepared by a process of recombinant expression in mammalian host systems, and pharmaceutical compositions of the antibodies that comprise the antibody and a pharmaceutically-acceptable excipient.

- a. cultivating the mammalian cell of claim 11 or the mammalian cell of claim 12 under conditions such that the antibody is expressed, and
- b. recovering the expressed antibody.

5 14. Use of the antibody of any one of claims 1 to 4 in the manufacture of a medicament for treating an autoimmune condition in a patient.

 15. The use of claim 14 in which the autoimmune condition is primary Sjögren's Syndrome, Sjögren's Syndrome, Systemic Lupus Erythematosus, Grave's
10 disease, or type 1 diabetes.

 16. The use of claim 15 in which the autoimmune condition is primary Sjögren's Syndrome or Sjögren's Syndrome .

15 17. The use of claim 15 in which the autoimmune condition is Systemic Lupus Erythematosus.

 18. The antibody of any one of claims 1 to 4 for use in therapy.

20 19. The antibody of Claim 18 for use in the treatment of an autoimmune condition.

 20. The antibody of Claim 18 for use in the treatment of primary Sjögren's Syndrome, Sjögren's Syndrome , Systemic Lupus Erythematosus, Grave's disease, or
25 type 1 diabetes.

 21. The antibody of Claim 18 for use in the treatment of primary Sjögren's Syndrome or Sjögren's Syndrome.

22. The antibody of Claim 18 for use in the treatment of Systemic Lupus Erythematosus.

23. A pharmaceutical composition comprising the antibody of any one of
5 Claims 1 or 2 and a pharmaceutically-acceptable excipient.