

WE CLAIM:

1. An antibody that binds human N3pGlu A β , comprising a light chain variable region (LCVR) and a heavy chain variable region (HCVR),
5 wherein the LCVR comprises:
 - i) LCDR1 having the amino acid sequence of SEQ ID NO: 4, LCDR2 having the amino acid sequence of SEQ ID NO: 6, and LCDR3 having the amino acid sequence of SEQ ID NO: 8; or
 - 10 ii) LCDR1 having the amino acid sequence of SEQ ID NO: 5, LCDR2 having the amino acid sequence of SEQ ID NO: 7, and LCDR3 having the amino acid sequence of SEQ ID NO: 8, and
 - iii) LCDR3 having the amino acid sequence of SEQ ID NO: 8, and wherein the HCVR comprises HCDR1 having the amino acid sequence of SEQ ID NO: 1, HCDR2 having the amino acid sequence of SEQ ID NO:
15 2, and HCDR3 having the amino acid sequence of SEQ ID NO: 3.
2. The antibody of Claim 1, wherein LCDR1 has the amino acid sequence of SEQ ID NO: 4, LCDR2 has the amino acid sequence of SEQ ID NO: 6, LCDR3 has the amino acid sequence of SEQ ID NO: 8, HCDR1 having
20 the amino acid sequence of SEQ ID NO: 1, HCDR2 having the amino acid sequence of SEQ ID NO: 2, and HCDR3 having the amino acid sequence of SEQ ID NO: 3.
3. The antibody of Claim 1, wherein LCDR1 has the amino acid sequence of SEQ ID NO: 5, LCDR2 has the amino acid sequence of SEQ ID NO: 7, LCDR3 has the amino acid sequence of SEQ ID NO: 8, HCDR1 having
25 the amino acid sequence of SEQ ID NO: 1, HCDR2 having the amino acid sequence of SEQ ID NO: 2, and HCDR3 having the amino acid sequence of SEQ ID NO: 3.
4. The antibody of any one of Claims 1-3, wherein the LCVR has the amino acid sequence of SEQ ID NO: 10 or 11, and the HCVR has the amino acid
30 sequence of SEQ ID NO: 9.

5. The antibody of Claim 4, comprising a LCVR having the amino acid sequence of SEQ ID NO: 10, and a HCVR having the amino acid sequence of SEQ ID NO:9.
- 5 6. The antibody of Claim 4, comprising a LCVR having the amino acid sequence of SEQ ID NO: 11, and a HCVR having the amino acid sequence of SEQ ID NO:9.
7. The antibody of any one of Claims 1-6, comprising a light chain (LC) having the amino acid sequence of SEQ ID NO: 13 or 14, and a heavy chain (HC) having the amino acid sequence of SEQ ID NO: 12.
- 10 8. The antibody of Claim 7, comprising a LC having the amino acid sequence of SEQ ID NO: 13 and a HC having the amino acid sequence of SEQ ID NO: 12.
9. The antibody of Claim 7, comprising a LC having the amino acid sequence of SEQ ID NO: 14 and a HC having the amino acid sequence of SEQ ID NO: 12.
- 15 10. The antibody of any one of Claims 1-9, comprising two LCs and two HCs, wherein the amino acid sequence of each LC is SEQ ID NO: 13 or 14, and the amino acid sequence of each HC is SEQ ID NO: 12.
11. The antibody of Claim 10, wherein the amino acid sequence of each LC is SEQ ID NO:13, and the amino acid sequence of each HC is SEQ ID NO: 12.
- 20 12. The antibody of Claim 10, wherein the amino acid sequence of each LC is SEQ ID NO:14, and the amino acid sequence of each HC is SEQ ID NO: 12.
- 25 13. A pharmaceutical composition comprising the antibody of any one of Claims 1 to 12 and one or more pharmaceutically acceptable carriers, diluents or excipients.

14. The antibody of any one of Claims 1 to 12 for use in therapy.
15. The antibody of any one of Claims 1 to 12 for use in the treatment of a condition characterized by amyloid deposits (A β deposits).
- 5 16. The antibody of any one of Claims 1 to 12 for use in the treatment of a condition selected from clinical or pre-clinical AD, Down's syndrome, and clinical or pre-clinical CAA.
17. The antibody of any one of Claims 1 to 12 for use in the treatment of a condition selected from prodromal AD, mild AD, moderate AD, and severe AD.
- 10 18. The antibody of any one of Claims 1 to 12 for use in slowing cognitive or functional decline in a patient diagnosed with a condition selected from clinical or pre-clinical AD, Down's syndrome, and clinical or pre-clinical CAA.
- 15 19. The antibody of any one of Claims 1 to 12 for use in slowing cognitive or functional decline in a patient diagnosed with a condition selected from prodromal AD, mild AD, moderate AD, and severe AD.

20. The antibody of any one of Claims 1 to 12 for use in reducing brain A β amyloid plaque load.
21. The antibody of any one of Claims 1 to 12 for use in treating a condition characterized by amyloid deposits (A β deposits) in a patient having the PSEN1 E280A genetic mutation.
22. The antibody of any one of Claims 1 to 12 for use in treating a condition characterized by amyloid deposits (A β deposits) in a patient having a genetic mutation that causes autosomal-dominant Alzheimer's disease.
23. The antibody of any one of Claims 1 to 12 for use in treating memory loss or cognitive decline in a patient having the PSEN1 E280A genetic mutation.
24. The antibody of any one of Claims 1 to 12 for use in treating memory loss or cognitive decline in a patient having a genetic mutation that causes autosomal-dominant Alzheimer's disease.
25. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for the treatment of a condition characterized by amyloid deposits (A β deposits).
26. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for the treatment of a condition selected from clinical or pre-clinical AD, Down's syndrome, and clinical or pre-clinical CAA.

27. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for the treatment of a condition selected from prodromal AD, mild AD, moderate AD, and severe AD.
- 5 28. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for slowing cognitive or functional decline in a patient diagnosed with a condition selected from clinical or pre-clinical AD, Down's syndrome, and clinical or pre-clinical CAA.
- 10 29. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for slowing cognitive or functional decline in a patient diagnosed with a condition selected from prodromal AD, mild AD, moderate AD, and severe AD.
30. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for reducing brain A β amyloid plaque load.
- 15 31. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for treating a condition characterized by deposition of A β in a patient having the PSEN1 E280A genetic mutation.
- 20 32. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for treating a condition characterized by deposition of A β in a patient having a genetic mutation that causes autosomal-dominant Alzheimer's disease.
- 25 33. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for treating memory loss or cognitive decline in a patient having the PSEN1 E280A genetic mutation.
- 30 34. Use of the antibody of any one of Claims 1 to 12 in the manufacture of a medicament for treating memory loss or cognitive decline in a patient having a genetic mutation that causes autosomal-dominant Alzheimer's disease.
35. A pharmaceutical composition for use in treating a condition characterized by amyloid deposits (A β deposits), comprising an effective amount of the antibody of any one of Claims 1 to 12.

36. A pharmaceutical composition for use in treating a condition selected from clinical or pre-clinical AD, Down's syndrome, and clinical or pre-clinical CAA, comprising an effective amount of the antibody of any one of Claims 1 to 12.
- 5 37. A pharmaceutical composition for use in treating a condition selected from prodromal AD, mild AD, moderate AD, and severe AD, comprising an effective amount of the antibody of any one of Claims 1 to 12.