

Claims

1. An anti-amyloid beta (anti-A β) antibody comprising a heavy chain variable domain and a light chain variable domain, wherein

a) the heavy chain variable domain (VH domain) comprises the following amino acid sequence of SEQ ID NO:2 ~~with four or fewer additional alterations in the framework regions~~

QVQLQESGPG LVKPSETLSL TCTVSGFSL S YGIHWIRQP PGKGLEWIGV WSGGITX₁X₆Y
X₂X₃X₄X₅SRVTIS RDTSKNQVSL KLSSVTAADT AVYYCARGSR YALDYWGQGT LTVSS

wherein X₁ is D or N; X₂ is A, or P; X₃ is A or S; X₄ is F or L; X₅ is I or K; and X₆ is F or Y, and

b) the light chain variable domain (VK domain) comprises the following amino acid sequence of SEQ ID NO:6 ~~with four or fewer additional alterations in the framework regions~~

DIQMTQSPSS LSASVGDRVT ITCRASQDIS NYLNWYQQKP GKAPKLLIYY TSRLHSGVPS
RFGSGSGSTD FTLTISSLQP EDFATYYCQQ GX₇TLPTFGG GTKLEIK

wherein X₇ is N or H.

~~2. An antibody according to claim 1 wherein the antibody binds amyloid peptides A β pE3-42 and A β 4-42 and does not bind amyloid peptide A β 1-42.~~

~~3. An antibody according to any one of the preceding claims wherein the VH domain comprises SEQ ID NO: 2 and the VL domain comprises SEQ ID NO: 6.~~

~~24. An antibody according to any one of claims 1, to 2, 3 wherein the heavy chain variable domain comprises SEQ ID NO: 3 with four or fewer additional alterations in the framework regions, optionally, wherein the heavy chain variable domain comprises SEQ ID NO: 3.~~

~~35. An antibody according to any one of claims 1 to or 2, 3 wherein the heavy chain variable domain comprises SEQ ID NO: 4 with four or fewer additional alterations in the framework regions, optionally, wherein the heavy chain variable domain comprises SEQ ID NO: 4.~~

~~46. An antibody according to any one of claims 1 to or 2, 3 wherein the heavy chain variable domain comprises SEQ ID NO: 5 with four or fewer additional alterations, such as~~

substitutions, in the framework regions, optionally wherein the heavy chain variable domain comprises SEQ ID NO: 5.

57. An antibody according to any one of claims 1 to 4, ~~6~~ wherein the light chain variable domain comprises SEQ ID NO: ~~7~~ with four or fewer additional alterations, such as substitutions, in the framework regions, optionally wherein the light chain variable domain comprises SEQ ID NO: 7.

68. An antibody according to any one of claims 1 to 4, ~~6~~ wherein the light chain variable domain comprises SEQ ID NO: ~~8~~ with four or fewer additional alterations, such as substitutions, in the framework regions, optionally wherein the light chain variable domain comprises SEQ ID NO: 8.

79. An antibody according to ~~any one of claims 1, to 3~~ comprising the VH domain of SEQ ID NO: 3 and the VK domain of SEQ ID NO: 7.

810. An antibody according to ~~any one of claims 1, to 3~~ comprising the VH domain of SEQ ID NO: 4 and the VK domain of SEQ ID NO: 7.

911. An antibody according to ~~any one of claims 1, to 3~~ comprising the VH domain of SEQ ID NO: 5 and the VK domain of SEQ ID NO: 8.

1012. An antibody according to ~~any one of claims 1, to 3~~ comprising the VH domain of SEQ ID NO: 5 and the VK domain of SEQ ID NO: 7.

1113. A pharmaceutical composition comprising an antibody according to any one of the preceding claims with a pharmaceutically acceptable carrier.

1214. An antibody according to any one of claims 1 to 10-12 or the pharmaceutical composition of claim 11-13, for use as a medicament ~~in a method of treatment of the human or animal body~~.

1315. An antibody according to any one of claims 1 to 10-12 or the pharmaceutical composition of claim 11-13, for use in a method of treatment of Alzheimer's disease in an individual.

~~14~~16. Use of an antibody according to any one of claims 1 to ~~10~~12 or the pharmaceutical composition of claim ~~11~~13 in the preparation of a medicament for the treatment of Alzheimer's disease in an individual.