

identity to the amino acid sequence of SEQ ID NO: 06, or (c) a VH sequence as in (a) and a VL sequence as in (b).

In one preferred embodiment the humanized antibody comprises a VH sequence of SEQ ID NO: 04 and a VL sequence of SEQ ID NO: 06.

5 One aspect as reported herein is a humanized antibody that specifically binds to human and cynomolgus IL-1beta, wherein the humanized antibody comprises (a) a HVR-H1 comprising the amino acid sequence of SEQ ID NO: 25, (b) a HVR-H2 comprising the amino acid sequence of SEQ ID NO: 27, (c) a HVR-H3 comprising the amino acid sequence of SEQ ID NO: 28, (d) a HVR-L1 comprising the amino acid sequence of SEQ ID NO: 29, (e) a HVR-L2 comprising the amino acid sequence of SEQ ID NO: 30, and (f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 31,

15 wherein in the heavy chain variable domain at position 48 is an isoleucine amino acid residue, at position 52a is a serine amino acid residue, at position 67 is an alanine amino acid residue, at position 69 is a phenylalanine amino acid residue, at position 71 is a valine amino acid residue and at position 93 is a valine amino acid residue, and

wherein in the light chain variable domain at position 36 is a serine amino acid residue, wherein all numbering are according to the Kabat numbering system,

20 and wherein the antibody comprises a VH amino acid sequence having at least 95 % amino acid sequence identity to the amino acid sequence of SEQ ID NO: 04; and a VL amino acid sequence having at least 95 % sequence identity to the amino acid sequence of SEQ ID NO: 06.

25 In one embodiment the humanized antibody is of the human subclass IgG1 or the human subclass IgG4.

In one embodiment the humanized antibody is of the human subclass IgG1 with a kappa light chain.

In one embodiment the humanized antibody is a monoclonal antibody.

30 As reported herein is an antibody comprising a VH sequence of SEQ ID NO: 04 and a VL sequence of SEQ ID NO: 06.

Patent Claims

1. A humanized antibody that specifically binds to human and cynomolgus IL-1beta, wherein the humanized antibody comprises (a) a HVR-H1 comprising the amino acid sequence of SEQ ID NO: 25, (b) a HVR-H2 comprising the amino acid sequence of SEQ ID NO: 27, (c) a HVR-H3 comprising the amino acid sequence of SEQ ID NO: 28, (d) a HVR-L1 comprising the amino acid sequence of SEQ ID NO: 29, (e) a HVR-L2 comprising the amino acid sequence of SEQ ID NO: 30, and (f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 31,

wherein in the heavy chain variable domain at position 48 is an isoleucine amino acid residue, at position 52a is a serine amino acid residue, at position 67 is an alanine amino acid residue, at position 69 is a phenylalanine amino acid residue, at position 71 is a valine amino acid residue and at position 93 is a valine amino acid residue, and

wherein in the light chain variable domain at position 36 is a serine amino acid residue, wherein all numbering are according to the Kabat numbering system,

and wherein the antibody comprises a VH amino acid sequence having at least 95 % amino acid sequence identity to the amino acid sequence of SEQ ID NO: 04; and a VL amino acid sequence having at least 95 % sequence identity to the amino acid sequence of SEQ ID NO: 06.
2. The humanized antibody according to claim 1 comprising a VH amino acid sequence of SEQ ID NO: 04 and a VL amino acid sequence of SEQ ID NO: 06.
3. The humanized antibody according to claim 1 or 2 wherein the humanized antibody is of the human subclass IgG1 or the human subclass IgG4.
4. The humanized antibody according to any one of claims 1 to 3, wherein the antibody is a bispecific antibody.

12. The humanized antibody according to any one of claims 1 to 9 for use as a medicament.
13. Use of the humanized antibody according to any one of claims 1 to 9 in the manufacture of a medicament.