Claims

1. A binding agent comprising at least two binding domains, wherein a first binding domain binds to a first receptor of the tumor necrosis factor (TNF) superfamily and a second binding domain binds to a second receptor of the TNF superfamily, wherein
the first binding domain binds to CD40 and the second binding domain binds to 4-1BB (CD137), wherein
the binding agent is a bispecific antibody, wherein the binding agent is an agonistic binding agent and wherein
the binding agent activates the first receptor and the second receptor at once.

2. The binding agent of claim 1, wherein the binding agent is in the format of a full-length antibody or an antibody fragment.

3. The binding agent according to claim 1 or 2, wherein the second binding domain binds to 4-1BB (CD137), and comprises
   (a) the heavy chain complementarity determining region HCDR1, HCDR2 and HCDR3, and
   the light chain complementarity determining region LCDR1, LCDR2 and LCDR3
   of an antibody selected from the group consisting of AB137_1 to AB137_12 as shown in Table 9; or
   (b) the heavy chain variable domain (VH) and the light chain variable domain (VL)
   of an antibody selected from the group consisting of AB137_1 to AB137_12 as shown in Table 9.

4. The binding agent according to any one of claims 1 to 3, wherein the first binding domain binds to CD40, and comprises
   (a) heavy chain complementarity determining region HCDR1 having the amino acid sequence of SEQ ID NO: 2323, HCDR2 having the amino acid sequence

of SEQ ID NO: 2324 and HCDR3 having the amino acid sequence of SEQ ID NO: 2325, and

light chain complementarity determining region LCDR1 having the amino acid sequence of SEQ ID NO: 2326, LCDR2 having the amino acid sequence of SEQ ID NO: 2327 and LCDR3 having the amino acid sequence of SEQ ID NO: 2328; or

(b) heavy chain variable domain (VH) having the amino acid sequence of SEQ ID NO: 2321 and light chain variable domain (VL) having the amino acid sequence of SEQ ID NO: 2322.

5. The binding agent according to any one of claims 1 to 4, comprising one or more heavy chain constant domains of an immunoglobulin and/or light chain constant domains of an immunoglobulin.

6. The binding agent according to any one of claims 1 to 5, wherein the first binding domain binding to CD40 comprises

(a) the heavy chain complementarity determining region HCDR1 having the amino acid sequence of SEQ ID NO: 2323, the HCDR2 having the amino acid sequence of SEQ ID NO: 2324 and the HCDR3 having the amino acid sequence of SEQ ID NO: 2325, and

the light chain complementarity determining region LCDR1 having the amino acid sequence of SEQ ID NO: 2326, the LCDR2 having the amino acid sequence of SEQ ID NO: 2327 and the LCDR3 having the amino acid sequence of SEQ ID NO: 2328; or

(b) the heavy chain variable domain (VH) having the amino acid sequence of SEQ ID NO: 2321 and the light chain variable domain (VL) having the amino acid sequence of SEQ ID NO: 2322 and wherein

the second binding domain binding to 4-1BB (CD137) is selected from the group consisting of

(c) the heavy chain complementarity determining region HCDR1 having the amino acid sequence of SEQ ID NO: 2255, the HCDR2 having the amino acid

sequence of SEQ ID NO: 2256 and the HCDR3 having the amino acid sequence of SEQ ID NO: 2257, and

the light chain complementarity determining region LCDR1 having the amino acid sequence of SEQ ID NO: 2258, the LCDR2 having the amino acid sequence of SEQ ID NO: 2259 and the LCDR3 having the amino acid sequence of SEQ ID NO: 2260;

(d) the heavy chain variable domain (VH) having the amino acid sequence of SEQ ID NO: 2227 and the light chain variable domain (VL) having the amino acid sequence of SEQ ID NO: 2228;

(e) the heavy chain complementarity determining region HCDR1 having the amino acid sequence of SEQ ID NO: 2315, the HCDR2 having the amino acid sequence of SEQ ID NO: 2316 and the HCDR3 having the amino acid sequence of SEQ ID NO: 2317, and

the light chain complementarity determining region LCDR1 having the amino acid sequence of SEQ ID NO: 2318, the LCDR2 having the amino acid sequence of SEQ ID NO: 2319 and the LCDR3 having the amino acid sequence of SEQ ID NO: 2320; and

(f) the heavy chain variable domain (VH) having the amino acid sequence of SEQ ID NO: 2247 and the light chain variable domain (VL) having the amino acid sequence of SEQ ID NO: 2248.

7. A nucleic acid molecule encoding a binding agent according to any one of claims 1 to 6, wherein, preferably, the nucleic acid molecule is contained in a vector.

8. A cell comprising a nucleic acid molecule according to claim 7.

9. A pharmaceutical composition comprising, as an active agent, a binding agent according to any one of claims 1 to 6, a nucleic acid molecule according to claim 7, or a cell according to claim 8.

10. The pharmaceutical composition according to claim 9, further comprising a pharmaceutically acceptable carrier and/or excipient.

11. A kit comprising a binding agent according to any one of claims 1 to 6, a nucleic acid molecule according to claim 7, a cell according to claim 8, or a pharmaceutical composition according to claim 9 or 10.

12. A binding agent according to any one of claims 1 to 6, a nucleic acid molecule according to claim 7, a cell according to claim 8, or a pharmaceutical composition according to claim 9 or 10 for use as a medicament.

13. A binding agent according to any one of claims 1 to 6, a nucleic acid molecule according to claim 7, a cell according to claim 8, or a pharmaceutical composition according to claim 9 or 10 for use in the treatment of a disease selected from the group consisting of cancer, infectious diseases, inflammatory diseases, metabolic diseases, autoimmune disorders, degenerative diseases, apoptosis-associated diseases and transplant rejections.