

CLAIMS

1. A human, humanized or chimeric antibody molecule which specifically binds to human glucocorticoid-induced TNF receptor (GITR) and cynomolgus monkey GITR, or an antigen-binding portion thereof, in which the antibody molecule or antigen-binding portion comprises

5 (a) the amino acid sequences GFSLSTSGYGVG (SEQ ID NO: 29) (HCDR1), LAHIWWDDDKYYVDSVKG (SEQ ID NO: 26) (HCDR2), TRQYFPFAY (SEQ ID NO: 31) (HCDR3), RASQSVGSNLA (SEQ ID NO: 32) (LCDR1), SASRYT (SEQ ID NO: 33) (LCDR2) and QQYSTDPLT (SEQ ID NO: 34) (LCDR3) [Clone D_A6]; or

(b) the amino acid sequences GFSLSTFGYGVG (SEQ ID NO: 35) (HCDR1),
10 LAHIWWDDDKYYVDSVKG (SEQ ID NO: 26) (HCDR2), TRQYFPFAY (SEQ ID NO: 31) (HCDR3), RASQSVGTNLA (SEQ ID NO: 36) (LCDR1), YASYRYT (SEQ ID NO: 37) (LCDR2) and QQYSNDPLT (SEQ ID NO: 38) (LCDR3) [Clone G_G10]; or

(c) the amino acid sequences GFSLSTSGYGVG (SEQ ID NO: 29) (HCDR1),
15 LAHIWWDDDKYYVDSVKG (SEQ ID NO: 26) (HCDR2), TRLYFPFAY (SEQ ID NO: 39) (HCDR3), RASQNVGSNLA (SEQ ID NO: 40) (LCDR1), SASNRYT (SEQ ID NO: 41) (LCDR2) and QQYSTDPLT (SEQ ID NO: 34) (LCDR3) [Clone I_C2]; or

(d) the amino acid sequences GFSLSTSGYGVG (SEQ ID NO: 29) (HCDR1),
20 LAHIWWDDDKYYVDSVKG (SEQ ID NO: 26) (HCDR2), TRQYFPFAY (SEQ ID NO: 31) (HCDR3), RASQSVGSNLA (SEQ ID NO: 32) (LCDR1), SASNRYT (SEQ ID NO: 44) (LCDR2) and QQYSTDPLT (SEQ ID NO: 34) (LCDR3) [Clone A6.1].

2. An antibody molecule or antigen-binding portion according to Claim 1, comprising one or more human variable domain framework scaffolds into which the CDRs have been inserted.

25 3. An antibody molecule or antigen-binding portion according to Claim 1 or 2, comprising an IGHV3-7 human germline scaffold into which the corresponding HCDR sequences have been inserted.

4. An antibody molecule or antigen-binding portion according to Claim 1 or 2, comprising an IGKV3-11 human germline scaffold into which the corresponding LCDR sequences have
30 been inserted.

5. An antibody molecule or antigen-binding portion according to any preceding claim, comprising an immunologically inert constant region.
6. An antibody molecule or antigen-binding portion according to any preceding claim, which is a Fab fragment, a F(ab)₂ fragment, an Fv fragment, a tetrameric antibody, a
- 5 tetraivalent antibody, a multispecific antibody (for example, a bivalent antibody), a single domain antibody, a monoclonal antibody or a fusion protein.
7. An immunoconjugate comprising an antibody molecule or antigen-binding portion thereof as defined in any of Claims 1 to 6 linked a therapeutic agent.
8. A nucleic acid molecule encoding an antibody molecule or antigen-binding portion
- 10 thereof as defined in any of Claims 1 to 6.
9. A vector comprising a nucleic acid molecule according to Claim 8.
10. A host cell comprising a nucleic acid molecule as defined in Claim 8 or a vector as defined in Claim 9.
11. A pharmaceutical composition comprising an antibody molecule or antigen-binding
- 15 portion thereof as defined in any of Claims 1 to 6, or a nucleic acid molecule as defined in Claim 8, or a vector as defined in Claim 9.
12. An antibody molecule or antigen-binding portion thereof as defined in any of Claims 1 to 6, or a immunoconjugate as defined in Claim 7, or a nucleic acid molecule as defined in Claim 8, or a vector as defined in Claim 9, or a pharmaceutical composition as defined in
- 20 Claim 11, for use as a medicament.
13. An antibody molecule or antigen-binding portion thereof as defined in any of Claims 1 to 6, or a immunoconjugate as defined in Claim 7, or a nucleic acid molecule as defined in Claim 8, or a vector as defined in Claim 9, or a pharmaceutical composition as defined in Claim 11, for use in the treatment of cancer.
- 25 14. Use of an antibody molecule or antigen-binding portion thereof as defined in any of Claims 1 to 6, or a immunoconjugate as defined in Claim 7, or a nucleic acid molecule as defined in Claim 8, or a vector as defined in Claim 9 in the preparation of a medicament for the treatment of cancer.

15. An antibody molecule, or antigen-binding portion thereof, or an immunoconjugate, or a nucleic acid molecule, or a vector for use according to Claim 13, or a use according to Claim 14, in which the cancer is selected from the group consisting of: pancreatic cancer, melanoma, breast cancer, lung cancer, bronchial cancer, colorectal cancer, prostate cancer, stomach cancer, ovarian cancer, urinary bladder cancer, brain or central nervous system cancer, peripheral nervous system cancer, esophageal cancer, cervical cancer, uterine or endometrial cancer, cancer of the oral cavity or pharynx, liver cancer, kidney cancer, testicular cancer, biliary tract cancer, small bowel or appendix cancer, salivary gland cancer, thyroid gland cancer, adrenal gland cancer, osteosarcoma, chondrosarcoma, and cancer of hematological tissues.
16. An antibody molecule, or antigen-binding portion thereof, or an immunoconjugate, or a nucleic acid molecule, or a vector for use according to Claim 12 or 13, in which the antibody, antigen-binding portion thereof, immunoconjugate, nucleic acid, vector or pharmaceutical composition is for separate, sequential or simultaneous use in a combination combined with a second therapeutic agent, for example an anti-cancer agent.