Patent Claims

~~1. Antibody binding to human TWEAK, characterized by comprising as heavy chain variable domain CDR3H selected from the group consisting of SEQ ID NO: 8, 16 or 24.~~

~~2~~1. Chimeric, humanized or T-cell epitope depleted variant ~~a) of an antibody comprising a variable light chain of SEQ ID NO:1 and a variable heavy chain of SEQ ID NO:5, b) of an antibody comprising a variable light chain of SEQ ID NO:9 and a variable heavy chain of SEQ ID NO:13 or c)~~ of an antibody comprising a variable light chain of SEQ ID NO:17 and a variable heavy chain of SEQ ID NO:21.

~~3. Antibody according to claim 1, characterized~~

~~a) by comprising CDR1H of SEQ ID NO:6, CDR2H of SEQ ID NO:7, CDR3H of SEQ ID NO:8 and CDR1L of SEQ ID NO:2, CDR2L of SEQ ID NO:3, CDR3L of SEQ ID NO:4, or~~

~~b) by comprising CDR1H of SEQ ID NO:14, CDR2H of SEQ ID NO:15, CDR3H of SEQ ID NO:16 and CDR1L of SEQ ID NO:10, CDR2L of SEQ ID NO:11, CDR3L of SEQ ID NO:12, or~~

~~c) by comprising CDR1H of SEQ ID NO:22, CDR2H of SEQ ID NO:23, CDR3H of SEQ ID NO:24 and CDR1L of SEQ ID NO:18, CDR2L of SEQ ID NO:19, CDR3L of SEQ ID NO:20.~~

~~4. Antibody binding to human TWEAK, characterized by comprising by comprising CDR1H of SEQ ID NO:6, CDR2H of SEQ ID NO:7, CDR3H of SEQ ID NO:8 and CDR1L of SEQ ID NO:2, CDR2L of SEQ ID NO:3, CDR3L of SEQ ID NO:4.~~

~~5. Antibody binding to human TWEAK, characterized by comprising CDR1H of SEQ ID NO:14, CDR2H of SEQ ID NO:15, CDR3H of SEQ ID NO:16 and CDR1L of SEQ ID NO:10, CDR2L of SEQ ID NO:11, CDR3L of SEQ ID NO:12.~~

~~6~~2. Antibody binding to human TWEAK, characterized by comprising CDR1H of SEQ ID NO:22, CDR2H of SEQ ID NO:23, CDR3H of SEQ ID NO:24

and CDR1L of SEQ ID NO:18, CDR2L of SEQ ID NO:19, CDR3L of SEQ ID NO:20.

73. Antibody according to claim 62, characterized by comprising a) a variable light chain of SEQ ID NO: 27 and a variable heavy chain of SEQ ID NO: 41, b) a variable light chain of SEQ ID NO: 27 and a variable heavy chain of SEQ ID NO: 44, c) a variable light chain of SEQ ID NO: 27 and a variable heavy chain of SEQ ID NO: 45, d) a variable light chain of SEQ ID NO: 26 and a variable heavy chain of SEQ ID NO: 47, e) a variable light chain of SEQ ID NO: 29 and a variable heavy chain of SEQ ID NO: 44, f) a variable light chain of SEQ ID NO: 31 and a variable heavy chain of SEQ ID NO: 45, g) a variable light chain of SEQ ID NO: 29 and a variable heavy chain of SEQ ID NO: 41, or h) a variable light chain of SEQ ID NO: 29 and a variable heavy chain of SEQ ID NO: 39.

84. Antibody according to claim 62, characterized by comprising a variable light chain of SEQ ID NO: 27 and a variable heavy chain of SEQ ID NO: 41, b) a variable light chain of SEQ ID NO: 27 and a variable heavy chain of SEQ ID NO: 45, c) a variable light chain of SEQ ID NO: 29 and a variable heavy chain of SEQ ID NO: 44, d) a variable light chain of SEQ ID NO: 29 and a variable heavy chain of SEQ ID NO: 41, or e) a variable light chain of SEQ ID NO: 29 and a variable heavy chain of SEQ ID NO: 39.

95. Antibody according to claim 62, characterized by a combination of a variable light chain sequence/variable heavy chain sequence selected from the group consisting of SEQ ID NO:1/SEQ ID NO:5, 9/13, SEQ ID NO:17/ SEQ ID NO:21, 25/37, 26/38, 27/39, 28/40, 29/41, 30/42, 31/43, 32/44; 33/45, 34/46, 35/47, 36/48, 56/57, 58/59.

106. Antibody according to claim 62, characterized by comprising a variable heavy chain or variable light chain selected from the group of variable heavy or light chains of SEQ ID NO:17, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 56, 58, 21, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, or 48, 57, or 59.

117. Pharmaceutical composition characterized by comprising an antibody according to claims 1 to 106.

128. Use of an antibody according to claims 1 to 10-6 for the manufacture of a pharmaceutical composition.

~~13~~9. An antibody according to claims 1 to ~~10~~ 6 for the treatment of cancer, or autoimmune diseases, rheumatoid arthritis, psoratic arthritis, muscle diseases, e.g. muscular dystrophy, multiple sclerosis, chronic kidney diseases, bone diseases, e.g. bone degeneration in multiple myeloma, systemic lupus erythematosus, lupus nephritis, and vascular injury.

~~14~~10. An antibody according to claims 1 to ~~10~~ 6 for the treatment of colon, lung, or pancreatic cancer.

~~15~~11. Use of an antibody according to claims 1 to ~~10~~ 6 for manufacture of a medicament for the treatment of cancer, or autoimmune diseases, rheumatoid arthritis, psoratic arthritis, muscle diseases, e.g. muscular dystrophy, multiple sclerosis, chronic kidney diseases, bone diseases, e.g. bone degeneration in multiple myeloma, systemic lupus erythematosus, lupus nephritis, and vascular injury.

~~16~~12. Use of an antibody according to claims 1 to ~~10~~ 6 for manufacture of a medicament for the treatment of colon, lung, or pancreatic cancer.

~~17~~13. Nucleic acid encoding an antibody according to claims 1 to ~~10~~6.

~~18~~14. Expression vectors characterized by comprising a nucleic acid according to claim ~~17~~ 13 for the expression of an antibody binding to TWEAK in a prokaryotic or eukaryotic host cell.

~~19~~15. Prokaryotic or eukaryotic host cell comprising a vector according to claim ~~18~~14.

~~20~~16. Method for the production of a recombinant antibody according to claims 1 to ~~10~~6, characterized by expressing a nucleic acid according to claim ~~17~~ 13 in a prokaryotic or eukaryotic host cell and recovering said antibody from said cell or the cell culture supernatant.