

Claims

1. An antibody that binds human CD3 which antibody comprises a heavy chain and light chain wherein said heavy chain comprises a variable region that comprises the amino acid sequence:

QVQLV QSGGG VVQPG RSLRL SCVAS GFTFS SYGMH WVRQA PGKGL EWVAA

5 IWYX₁X₂RKQDY ADSVK GRFTI SRDNS KNTLY LQMNS LRAED TAVYY
CTRGT GYNWF DPWGQ GTLVT VSS

with 0-10, preferably 0-5 amino acid insertions, deletions, substitutions, additions or a combination thereof at one or more positions other than the position indicated by X₁X₂;

10 wherein

X₁ = N and X₂ = A;

X₁ = N and X₂ = T;

X₁ = S and X₂ = G;

X₁ = H and X₂ = G;

15 X₁ = D and X₂ = G; or

X₁ = H and X₂ = A.

2. The antibody of claim 1, wherein said light chain comprises a common light chain variable region.

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3. The antibody of claim 1 or 2, wherein said common light chain variable region comprises an O12 / IgVκ1-39light chain variable region.

4. The antibody of claim 3, wherein said light chain variable region
25 is a germline O12 / IgVκ1-39*01 variable region.

5. The antibody of claim 4, wherein the light chain variable region comprises the kappa light chain IgV κ 1-39*01/IGJ κ 1*01 or IgV κ 1-39*01/IGJ κ 5*01.
- 5 6. The antibody of claim 5, wherein the light chain variable region comprises the germline kappa light chain IgV κ 1-39*01/IGJ κ 1*01 or IgV κ 1-39*01/IGJ κ 5*01.
7. The antibody of claim 1-3, wherein said light chain variable
10 region comprises the amino acid sequence.
DIQMT QSPSS LSASV GDRVITCRA SQSIS SYLNW YQQKP GKAPK
LLIYA ASSLQ SGVPS RFSGS GSGTD FTLTI SSLQP EDFAT YYCQQ
SYSTP PTFGQ GTKVE IK or DIQMT QSPSS LSASV GDRVITCRA
SQSIS SYLNW YQQKP GKAPK LLIYA ASSLQ SGVPS RFSGS GSGTD
15 FTLTI SSLQP EDFAT YYCQQ SYSTP PITFG QGTRL EIK with 0-5 amino
acid insertions, deletions, substitutions, additions or a combination thereof.
8. The antibody of any one of claims 1-7, which is a bispecific
antibody.
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9. The bispecific antibody of claim 8, comprising a H/L chain
combination of any one of claims 1-7, and a H/L chain combination that
binds a tumor-antigen.
- 25 10. The bispecific antibody of claim 9, wherein said H/L chain
combination that binds a tumor-antigen binds CLEC12A.
11. The antibody or bispecific antibody of claims 1-10, which is a
30 human or humanized antibody.

12. The bispecific antibody of any one of claims 8-11, comprising two different immunoglobulin heavy chains with compatible heterodimerization domains.
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13. The bispecific antibody of claim 12, wherein said compatible heterodimerization domains are compatible immunoglobulin heavy chain CH3 heterodimerization domains.
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14. The bispecific antibody of any one of claims 8-13, wherein said bispecific antibody is an IgG antibody with a mutant CH2 and/or lower hinge domain such that interaction of the bispecific IgG antibody to a Fc-gamma receptor is reduced.
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15. The bispecific antibody of claim 14, wherein the mutant CH2 and/or lower hinge domain comprise an amino substitution at position 235 and/or 236 (Kabat numbering), preferably an L235G and/or G236R substitution.
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16. The bispecific antibody of any one of claims 8-15, comprising a common light chain.
17. The antibody of any one of claims 1-16, for use in the treatment of a subject in need thereof.