

CLAIMS

1. An isolated anti-PcrV antibody that specifically binds to an epitope on *Pseudomonas* PcrV, wherein the epitope comprises amino acid residues Gln160, Asp165, Asp170, Asp173, Thr175, and Ser202 of *Pseudomonas* PcrV.
- 5 2. The isolated anti- PcrV antibody of claim 1, wherein the anti- PcrV antibody binds to the *Pseudomonas* PcrV with a K_d from about 0.1 pM to about 1 nM.
3. An isolated anti- PcrV antibody, wherein the anti- PcrV antibody comprises:
 - 10 a heavy chain variable domain (V_H) comprising a heavy chain complementarity determining region (HC-CDR) 1 comprising $X_1X_2X_3MS$ (SEQ ID NO: 39), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X_1 is D or S, X_2 is Y or N and X_3 is P, H, Y or S; an HC-CDR2 comprising $X_1ISESGGSTX_2X_3ADSVKG$ (SEQ ID NO: 40), or a variant thereof comprising up to about 3 amino acid
 - 15 substitutions, wherein X_1 is G or V; X_2 is N or Y; and X_3 is D or Y; and an HC-CDR3 comprising $GRFX_1X_2X_3X_4X_5X_6FX_7RAVYGMDV$ (SEQ ID NO: 41), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X_1 is S or C, X_2 is T, G, D, Y, Q or A, X_3 is S, D, N, E, L, A, or Y, X_4 is S, T, Y, or A, X_5 is S, H, Q, A, R, K, G, E, Y or D, X_6 is H or C, and X_7 is F or Y;
 - 20 and a light chain variable domain (V_L) comprising a light chain complementarity determining region (LC-CDR) 1 comprising $RASQGIX_1SYLA$ (SEQ ID NO: 42), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X_1 is S or R; a LC-CDR2 comprising $AASTLQS$ (SEQ ID NO: 34), or a variant thereof comprising up to about 3 amino acid substitutions; and a LC-CDR3 comprising QLX_1SYPLX_2
 - 25 (SEQ ID NO: 43), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X_1 is S, N or K, and X_2 is S or T.
 4. The isolated anti- PcrV antibody of claim 3, wherein the anti- PcrV antibody comprises:
 - 30 a V_H comprising a HC-CDR1 comprising DX_1X_2MS (SEQ ID NO: 44), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X_1 is N or Y and X_2 is P, H, or Y; an HC-CDR2 comprising $X_1ISESGGSTNYADSVKG$ (SEQ ID NO: 45), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X_1 is G

or V; and an HC-CDR3 comprising GRFSTX₁SX₂HFX₃RAVYGMDV (SEQ ID NO: 35 46), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X₁ is N, S, D, or L, X₂ is S or A, and X₃ is F or Y; and a V_L comprising a LC-CDR1 comprising RASQGISSYLA (SEQ ID NO: 32), or a variant thereof comprising up to about 3 amino acid substitutions; a LC-CDR2 comprising AASTLQS (SEQ ID NO: 34), or a variant thereof comprising up to about 3 40 amino acid substitutions; and a LC-CDR3 comprising QQLSSYPLX₁ (SEQ ID NO: 47), or a variant thereof comprising up to about 3 amino acid substitutions, wherein X₁ is S or T.

5. An isolated anti-PcrV antibody, comprising:
45 a V_H comprising an HC-CDR1 comprising the amino acid sequence of any one of SEQ ID NOs: 1-8, or a variant thereof comprising up to about 3 amino acid substitutions; an HC-CDR2 comprising the amino acid sequence of any one of SEQ ID NOs: 9-14, or a variant thereof comprising up to about 3 amino acid substitutions; and an HC-CDR3 comprising the amino acid sequence of any one of SEQ ID NOs: 15-31, or a variant 50 thereof comprising up to about 3 amino acid substitutions; and a V_L comprising a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32-33, or a variant thereof comprising up to about 3 amino acid substitutions; a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, or a variant thereof comprising up to about 3 amino acid substitutions; and a LC-CDR3 comprising the 55 amino acid sequence of any one of SEQ ID NOs: 35-38, or a variant thereof comprising up to about 3 amino acid substitutions.

6. An isolated anti-PcrV antibody, comprising a V_H comprising an HC-CDR1, an HC-CDR2, and an HC-CDR3 of the V_H comprising the amino acid sequence of any 60 one of SEQ ID NOs: 48-64; and a V_L comprising a LC-CDR1, a LC-CDR2, and a LC-CDR3 of the V_L comprising the amino acid sequence of any one of SEQ ID NOs: 65-70.

7. The isolated anti-PcrV antibody of any one of claims 1-6, comprising:
65 (i) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ

- ID NO: 9, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 15, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- (ii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 2, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 16, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- (iii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 9, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 17, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 36, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- (iv) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 18, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3

- comprising the amino acid sequence of SEQ ID NO: 37, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 100 (v) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 19, or a variant thereof comprising up to about 5 amino acid
- 105 substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 110 (vi) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 11, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 20, or a variant thereof comprising up to about 5 amino acid
- 115 substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 120 (vii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 4, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 21, or a variant thereof comprising up to about 5 amino acid
- substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 125 (viii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 5, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 22, or a variant thereof comprising up to about 5 amino acid
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- substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 37, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 135 (ix) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 6, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 23, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 37, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 140 (x) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 12, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 24, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 33, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 145 (xi) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 2, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 25, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 37, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
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- 165 (xii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 9, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 26, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 170 (xiii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 27, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 180 (xiv) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 28, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 190 (xv) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 7, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 13, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 29, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2
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- comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 37, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- 200 (xvi) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 30, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
- 205 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- (xvii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ
- 210 ID NO: 8, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 14, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 31, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
- 215 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 37, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- or
- (xviii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ
- 220 ID NO: 7, an HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 13, and an HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 29, or a variant thereof comprising up to about 5 amino acid substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
- 225 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 38, or a variant thereof comprising up to about 5 amino acid substitutions in the LC-CDRs.

8. The isolated anti-PcrV antibody of claim 7, comprising:

- 230 (i) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ
ID NO: 3, an HC-CDR2 comprising the amino acid sequence of SEQ ID
NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID
NO: 18, or a variant thereof comprising up to about 5 amino acid
substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
235 comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2
comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3
comprising the amino acid sequence of SEQ ID NO: 37, or a variant
thereof comprising up to about 5 amino acid substitutions in the LC-CDRs;
- (ii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ
240 ID NO: 3, an HC-CDR2 comprising the amino acid sequence of SEQ ID
NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID
NO: 19, or a variant thereof comprising up to about 5 amino acid
substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2
245 comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3
comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof
comprising up to about 5 amino acid substitutions in the LC-CDRs;
- (iii) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ
ID NO: 1, an HC-CDR2 comprising the amino acid sequence of SEQ ID
250 NO: 10, and an HC-CDR3 comprising the amino acid sequence of SEQ ID
NO: 28, or a variant thereof comprising up to about 5 amino acid
substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2
comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3
255 comprising the amino acid sequence of SEQ ID NO: 35, or a variant thereof
comprising up to about 5 amino acid substitutions in the LC-CDRs; or
- (iv) a V_H comprising an HC-CDR1 comprising the amino acid sequence of SEQ
ID NO: 7, an HC-CDR2 comprising the amino acid sequence of SEQ ID
NO: 13, and an HC-CDR3 comprising the amino acid sequence of SEQ ID
260 NO: 29, or a variant thereof comprising up to about 5 amino acid
substitutions in the HC-CDRs; and a V_L comprising an LC-CDR1
comprising the amino acid sequence of SEQ ID NO: 32, an LC-CDR2

comprising the amino acid sequence of SEQ ID NO: 34, and an LC-CDR3
comprising the amino acid sequence of SEQ ID NO: 37, or a variant
265 thereof comprising up to about 5 amino acid substitutions in the LC-CDRs.

9. The isolated anti- PcrV antibody of any one of claims 1-8, comprising:
a V_H comprising the amino acid sequence of any one of SEQ ID NOs: 48-64, or a
variant thereof having at least about 90% sequence identity to the amino acid
270 sequence of any one of SEQ ID NOs: 48-64; and
a V_L comprising the amino acid sequence of any one of SEQ ID NOs: 65-70, or a
variant thereof having at least about 90% sequence identity to the amino acid
sequence of any one of SEQ ID NOs: 65-70.
- 275 10. The isolated anti- PcrV antibody of claim 9, comprising:
a V_H comprising the amino acid sequence of any one of SEQ ID NOs: 51-52 and
61-62, or a variant thereof having at least about 90% sequence identity to the amino
acid sequence of any one of SEQ ID NOs: 51-52 and 61-62; and
a V_L comprising the amino acid sequence of SEQ ID NO: 65 or 67, or a variant
280 thereof having at least about 90% sequence identity to the amino acid sequence of
SEQ ID NO: 65 or 67.

11. The isolated anti-PcrV antibody of claim 9, comprising:
- (i) a V_H comprising the amino acid sequence of SEQ ID NO: 48 and a V_L
285 comprising the amino acid sequence of SEQ ID NO: 65;
 - (ii) a V_H comprising the amino acid sequence of SEQ ID NO: 49 and a V_L
comprising the amino acid sequence of SEQ ID NO: 65;
 - (iii) a V_H comprising the amino acid sequence of SEQ ID NO: 50 and a V_L
comprising the amino acid sequence of SEQ ID NO: 66;
 - 290 (iv) a V_H comprising the amino acid sequence of SEQ ID NO: 51 and a V_L
comprising the amino acid sequence of SEQ ID NO: 67;
 - (v) a V_H comprising the amino acid sequence of SEQ ID NO: 52 and a V_L
comprising the amino acid sequence of SEQ ID NO: 65;
 - (vi) a V_H comprising the amino acid sequence of SEQ ID NO: 53 and a V_L
295 comprising the amino acid sequence of SEQ ID NO: 65;

- (vii) a V_H comprising the amino acid sequence of SEQ ID NO: 54 and a V_L comprising the amino acid sequence of SEQ ID NO: 65;
 - (viii) a V_H comprising the amino acid sequence of SEQ ID NO: 55 and a V_L comprising the amino acid sequence of SEQ ID NO: 67;
 - 300 (ix) a V_H comprising the amino acid sequence of SEQ ID NO: 56 and a V_L comprising the amino acid sequence of SEQ ID NO: 67;
 - (x) a V_H comprising the amino acid sequence of SEQ ID NO: 57 and a V_L comprising the amino acid sequence of SEQ ID NO: 68;
 - (xi) a V_H comprising the amino acid sequence of SEQ ID NO: 58 and a V_L comprising the amino acid sequence of SEQ ID NO: 69;
 - 305 (xii) a V_H comprising the amino acid sequence of SEQ ID NO: 59 and a V_L comprising the amino acid sequence of SEQ ID NO: 65;
 - (xiii) a V_H comprising the amino acid sequence of SEQ ID NO: 60 and a V_L comprising the amino acid sequence of SEQ ID NO: 65;
 - 310 (xiv) a V_H comprising the amino acid sequence of SEQ ID NO: 61 and a V_L comprising the amino acid sequence of SEQ ID NO: 65;
 - (xv) a V_H comprising the amino acid sequence of SEQ ID NO: 62 and a V_L comprising the amino acid sequence of SEQ ID NO: 67;
 - (xvi) a V_H comprising the amino acid sequence of SEQ ID NO: 63 and a V_L comprising the amino acid sequence of SEQ ID NO: 65;
 - 315 (xvii) a V_H comprising the amino acid sequence of SEQ ID NO: 64 and a V_L comprising the amino acid sequence of SEQ ID NO: 67; or
 - (xviii) a V_H comprising the amino acid sequence of SEQ ID NO: 62 and a V_L comprising the amino acid sequence of SEQ ID NO: 70.
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12. An isolated anti-PcrV antibody that specifically binds to PcrV competitively with the isolated anti-PcrV antibody of any one of claims 1-11, or specifically binds to the same epitope as the isolated anti-PcrV antibody of any one of claims 1-11.
- 325 13. The isolated anti-PcrV antibody according to any one of claims 1-12, wherein the anti-PcrV antibody comprises an Fc fragment.

14. The isolated anti- PcrV antibody of claim 13, wherein the anti-PcrV antibody is a full-length IgG antibody.
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15. The isolated anti- PcrV antibody of claim 14, wherein the anti- PcrV antibody is a full-length IgG1 or IgG4 antibody.
16. The isolated anti- PcrV antibody of any one of claims 1-15, wherein the anti- PcrV
- 335 antibody is chimeric, human, or humanized.
17. The isolated anti- PcrV antibody according to any one of claims 1-12, wherein the anti-PcrV antibody is an antigen binding fragment selected from the group consisting of a Fab, a Fab', a F(ab')₂, a Fab'-SH, a single-chain Fv (scFv), an Fv fragment, a dAb, a
- 340 Fd , or a diabody.
18. An isolated nucleic acid molecule that encodes the isolated anti- PcrV antibody according to any one of claims 1-17.
- 345 19. A vector comprising the nucleic acid molecule of claim 18.
20. An isolated host cell comprising the isolated anti- PcrV antibody of any one of claims 1-17, the isolated nucleic acid of claim 18, or the vector of claim 19.
- 350 21. A method of producing an isolated anti- PcrV antibody, comprising:
- a) culturing the host cell of claim 20 under conditions effective to express the anti-PcrV antibody; and
- b) obtaining the expressed anti- PcrV antibody from the host cell.
- 355 22. A pharmaceutical composition comprising the anti-PcrV antibody according to any one of claims 1-17, the nucleic acid of claim 18, the vector of claim 19, or the isolated host cell of claim 20, and a pharmaceutically acceptable carrier.

23. A method of treating a disease or condition in an individual in need thereof, comprising
360 administering to the individual an effective amount of the pharmaceutical composition
of claim 22.
24. The method of claim 23, wherein the disease or condition is a pathogenic infection.
- 365 25. The method of claim 24, wherein the infection is a gram-negative bacterial infection.
26. The method of claim 25, wherein the bacterium is *Pseudomonas aeruginosa*.
27. The method of any one of claims 23-26, wherein the disease or condition comprises
370 one or more symptoms caused by *Pseudomonas aeruginosa* infection.
28. The method of claim 27, wherein the symptom comprises one or more of fever, chills,
fatigues, muscle and joint pain, swelling of joints, headache, diarrhea, skin rashes, pus
in wounds, bacteremia, acute pneumonia, intraperitoneal infection, respiratory tract
375 infections, septic shock, suppurative arthritis, enteritis, skin and soft tissue infections,
urinary tract infections, intestinal infections, ulcerative keratitis, chronic suppurative
otitis media, mastoiditis, sinusitis, or endocarditis.
29. The method of any one of claims 23-28, wherein the method further comprises
380 administering one or more therapeutic agents.
30. The method of claim 29, wherein at least one of the therapeutic agents is an antibiotic.
31. The method of claim 30, wherein the antibiotic is one or more of Imipenem,
385 Tobramycin, Ciprofloxacin, Meropenem or Aztreonam.