

CLAIMS

What is claimed is:

1. A humanized anti-endothelial monocyte activating polypeptide II (anti-EMAPII) antibody, comprising:
 - a heavy chain variable domain having an amino acid sequence with 90% or greater sequence identity to any one of SEQ ID NO: 1 to SEQ ID NO: 5; and
 - a light chain variable domain having an amino acid sequence with 90% or greater sequence identity to any one of SEQ ID NO: 6 to SEQ ID NO: 9.
2. The antibody according to claim 1, wherein the heavy chain variable domain has an amino acid sequence with 95% or greater sequence identity to any one of SEQ ID NO: 1 to SEQ ID NO: 5; and
 - the light chain variable domain has an amino acid sequence with 95% or greater sequence identity to any one of SEQ ID NO: 6 to SEQ ID NO: 9.
3. The antibody according to claim 1, wherein the heavy chain variable domain has an amino acid sequence with 99% or greater sequence identity to any one of SEQ ID NO: 2 or SEQ ID NO: 3; and
 - the light chain variable domain has an amino acid sequence with 99% or greater sequence identity to any one of SEQ ID NO: 6 or SEQ ID NO: 9.
4. A humanized anti-endothelial monocyte activating polypeptide II (anti-EMAPII) antibody, comprising a heavy chain variable domain having an amino acid sequence with 90% or greater sequence identity to any one of SEQ ID NO: 1 to SEQ ID NO: 5.
5. The antibody according to claim 4, wherein the heavy chain variable domain has an amino acid sequence with 95% or greater sequence identity to any one of SEQ ID NO: 2 or SEQ ID NO: 3.

6. A humanized anti-endothelial monocyte activating polypeptide II (anti-EMAPII) antibody, comprising a light chain variable domain having an amino acid sequence with 90% or greater sequence identity to any one of SEQ ID NO: 6 to SEQ ID NO: 9.
7. The antibody according to claim 6, wherein the light chain variable domain has an amino acid sequence with 95% or greater sequence identity to any one of SEQ ID NO: 6 or SEQ ID NO: 9.
8. A chimeric anti-endothelial monocyte activating polypeptide II (anti-EMAPII) antibody, comprising a heavy chain variable domain with 90% or greater sequence identity to SEQ ID NO: 10 and a light chain variable domain with 90% or greater sequence identity to SEQ ID NO: 11.
9. The antibody according to claim 8, wherein the heavy chain variable domain has 95% or greater sequence identity to SEQ ID NO: 10 and the light chain variable domain has 95% or greater sequence identity to SEQ ID NO: 11.
10. A recombinant vector, comprising a nucleic acid encoding an amino acid sequence set forth in any one of SEQ ID NO: 1 to SEQ ID NO: 11.
11. A cell transformed with the recombinant vector according to claim 10.
12. A method of producing an antibody, comprising culturing the transformed cell of claim 11 under conditions in which the antibody is expressed.
13. A pharmaceutical composition comprising the antibody according to any one of claims 1-9 and at least one pharmaceutically acceptable excipient.
14. A method of treating chronic obstructive pulmonary disease (COPD) in a subject in need thereof, the method comprising administering to the subject the pharmaceutical composition according to claim 13.

15. A method of treating emphysema in a subject in need thereof, the method comprising administering to the subject the pharmaceutical composition according to claim 13.

16. A method of treating bronchopulmonary dysplasia in a subject in need thereof, the method comprising administering to the subject the pharmaceutical composition according to claim 13.

17. A method of treating endothelial monocyte activating polypeptide II (EMAPII) mediated disease in a subject in need thereof, the method comprising administering to the subject the pharmaceutical composition according to claim 13.