CLAIMS

1. A CD24 protein for use in the manufacture of a medicament for reducing low-density lipoprotein (LDL) cholesterol (LDL-C) levels in a subject.

2. The CD24 according to claim 1, wherein the subject has an elevated LDL-C.

3. The CD24 according to claim 2, wherein the subject has a LDL-C greater than or equal to 75 mg/dL.

4. The CD24 according to claim 2, wherein the subject has a LDL-C of greater than or equal to 70 mg/dL or 190 mg/dL.

5. The CD24 according to claim 1, wherein the subject has been previously treated with another LDL-C-lowering drug.

6. The CD24 according to claim 5, wherein the other LDL-C-lowering drug is a statin.

7. The CD24 according to claim 5, wherein the other LDL-C-lowering drug is an antagonist of PCSK9.

8. The CD24 according to claim 1, wherein the CD24 protein comprises the sequence of a mature human CD24 or a variant thereof.

9. The CD24 according to claim 8, wherein the mature human CD24 comprises a sequence selected from the group consisting of the sequence of SEQ ID NO: 1 and 2.

10. The CD24 according to claim 1, wherein the CD24 protein is soluble.

11. The CD24 according to claim 1, wherein the CD24 protein is glycosylated.

12. The CD24 according to claim 8, wherein the CD24 protein further comprises a protein tag, wherein the protein tag is fused at the N-terminus or C-terminus of the CD24 protein.

13. The CD24 according to claim 12, wherein the protein tag comprises a portion of a mammalian immunoglobulin (Ig).

14. The CD24 according to claim 13, wherein the Ig portion is the Fc region of a human Ig protein.

15. The CD24 according to claim 14, wherein the Fc region comprises the hinge region and CH2 and CH3 domains of the human Ig protein, and wherein the Ig is selected from the group consisting of IgG1, IgG2, IgG3, IgG4, and IgA.

16. The CD24 according to claim 14, wherein the Fc region comprises the hinge region and CH2, CH3 and CH4 domains of IgM.

17. The CD24 according to claim 15, wherein the CD24 protein comprises the sequence of SEQ ID NO: 6, 11, or 12.

18. The CD24 according to claim 1, wherein the CD24 protein is produced using a eukaryotic protein expression system.

19. The CD24 according to claim 18, wherein the expression system comprises a vector contained in a Chinese Hamster Ovary cell line or a replication-defective retroviral vector.

20. The CD24 according to claim 19, wherein the replication-defective retroviral vector is stably integrated into the genome of a eukaryotic cell.

21. A CD24 protein for use in the manufacture of a medicament for treating or preventing atherosclerosis in a subject.

22. A CD24 protein for use in the manufacture of a medicament for lowering the risk of atherosclerotic cardiovascular disease in a subject.

23. A method of monitoring the activity of a CD24 protein in a subject, comprising comparing the amount of LDL-C in a blood sample obtained from the subject at a time point after administering the CD24 protein to the subject to an amount of LDL-C in a blood sample obtained from the subject before the time point, wherein a decrease in the amount of LDL-C over time is indicative of an increase in CD24 protein activity.

24. The method of claim 23, wherein the amount of the CD24 protein subsequently administered to the subject is adjusted according to the amount of LDL-C in the sample obtained after administering the CD24 protein to the subject.

25. The method of claim 24, wherein the amount of the CD24 protein in the subsequent administration is adjusted to maintain a specific activity or concentration level of the CD24 protein in the subject.