CLAIMS

1. Use of a CD24 protein in the manufacture of a medicament for preventing or treating relapse of a cancer in a subject, wherein the cancer is Acute Myeloid Leukemia (AML), Acute Lymphoblastic Leukemia (ALL), Chronic Myelogenous Leukemia (CML), Myelodysplastic syndrome (MDS), or Chronic Myelomonocytic Leukemia (CMML).

2. Use of a CD24 protein in the manufacture of a medicament for reducing cancer stem cell activity in a subject, wherein the cancer is Acute Myeloid Leukemia (AML), Acute Lymphoblastic Leukemia (ALL), Chronic Myelogenous Leukemia (CML), Myelodysplastic syndrome (MDS), or Chronic Myelomonocytic Leukemia (CMML).

3. The use of claim 2, wherein the cancer stem cell is a leukemia cancer stem cell.

4. The use of claim 2 or 3, wherein reducing cancer stem cell activity in the subject prevents or treats at least one of relapse and metastasis of a cancer of the subject.

5. The use of any one of claims 1-4, wherein the CD24 protein is administered at a dose of 240 mg or 480 mg.

6. The use of any one of claims 1-5, wherein the subject will undergo or has undergone a hematopoietic stem cell transplantation (HCT).

7. The use of claim 6, wherein the CD24 protein is to be administered before or after the HCT.

8. The use of claim 7, wherein the CD24 protein is to be administered one day before the HCT.

9. The use of claim 7 or 8, wherein the CD24 protein is to be administered more than once.

10. The use of claim 9, wherein the CD24 protein is to be administered in three biweekly doses, comprising a dose on the day before the HCT, a dose on day 14 after the HCT, and a dose on day 28 after the HCT

11. The use of claim 10, wherein the doses of the CD24 protein are 480 mg, 240 mg, and 240 mg, respectively.

12. The use of any one of claims 1-11, wherein the CD24 protein comprises a mature human CD24 polypeptide fused at its N-terminus or C-terminus to a Fc region of a mammalian immunoglobulin (Ig) protein.

13. The use of claim 12, wherein the mature human CD24 polypeptide comprises the sequence set forth in SEQ ID NO: 1 or 2.

14. The use of claim 13, wherein the Ig protein is human, and wherein the Fc region comprises a hinge region and CH2 and CH3 domains of IgG1, IgG2, IgG3, IgG4, or IgA.

15. The use of claim 13, wherein the Ig protein is human, and wherein the Fc region comprises a hinge region and CH2, CH3 and CH4 domains of IgM.

16. The use of claim 14, wherein the CD24 protein comprises the sequence set forth in SEQ ID NO: 6, 11, or 12.

17. The use of claim 16, wherein the amino acid sequence of the CD24 protein consists of the sequence set forth in SEQ ID NO: 6, 11, or 12.

18. The use of any one of claims 1-17, wherein the CD24 protein is soluble.

19. The use of any one of claims 1-18, wherein the CD24 protein is glycosylated.

20. The use of any one of claims 1-19, wherein the CD24 protein is prepared using a eukaryotic expression system.

21. The use of claim 20, wherein the eukaryotic expression system comprises expression from a vector in mammalian cells.

22. The use of claim 21, wherein the mammalian cells are Chinese Hamster Ovary cells.