CLAIMS

1. Use of a CD24 protein in the manufacture of a medicament for treating immune-related adverse events (irAEs) associated with a cancer therapy in a subject.

2. The use of claim 1, wherein the cancer therapy is an anti-CTLA4 antibody.

3. The use of claim 2, wherein the anti-CTLA4 antibody is Ipilimumab.

4. The use of claim 2, wherein the anti-CTLA4 antibody is intended for use in combination with another therapy.

5. The use of claim 1, where cancer therapy is an anti-PD-1 antibody or an anti-PD-L1 antibody.

6. The use of claim 5, wherein the anti-PD-1 antibody or anti-PD-L1 is intended for use in combination with another therapy.

7. The use of claim 1, wherein the cancer therapy is selected from the group consisting of a chimeric antigen receptor T cell; a T cell receptor (TCR) modified T cell; an activated natural killer cell; irradiation therapy; chemotherapy; and, a cancer cell-targeting antibody.

8. The use of any one of claims 1-7, wherein the CD24 protein comprises a mature human CD24 polypeptide.

9. The use of claim 8, wherein the mature human CD24 polypeptide comprises an amino acid sequence set forth in SEQ ID NO: 1 or 2.

10. The use of any one of claims 1-9, 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.

11. The use of claim 10, wherein the protein tag comprises a Fc region of a mammalian immunoglobulin (Ig) protein.

12. The use of claim 11, wherein the mammalian Ig protein is a human Ig protein.

13. The use of claim 12, wherein the Fc region comprises a hinge region and CH2 and CH3 domains of the human Ig protein, and wherein the human Ig protein is selected from the group consisting of IgG1, IgG2, IgG3, IgG4, and IgA.

14. The use of claim 12, wherein the Fc region comprises a hinge region and CH2, CH3 and CH4 domains of IgM.

15. The use of claim any one of claims 1-13, wherein the sequence of the CD24 protein comprises an amino acid sequence set forth in SEQ ID NO: 6, 11, or 12.

16. The use of any one of claims 1-15, wherein the CD24 protein is produced using a eukaryotic protein expression system.

17. The use of claim 16, wherein the expression system comprises a vector contained in a Chinese Hamster Ovary cell line or a replication-defective retroviral vector.

18. The use of claim 17, wherein the replication-defective retroviral vector is stably integrated into the genome of a eukaryotic cell.

19. The use of any one of claims 1-18, wherein the irAE is selected from the group consisting of diarrhea or another gastrointestinal disorder; pure red cell aplasia; microcytic anemia; lupus; autoimmune nephritis; autoimmune hepatitis; pneumonitis; a heart disease such as myocarditis and pericarditis; endocrinopathy; Addison's disease; hypogonadism; Sjogren's syndrome; and, type I diabetes.

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

21. The use of any one of claims 1-20, wherein the CD24 protein is glycosylated.

22. The use of any one of claims 1-13 and 15-21, wherein the sequence of the CD24 protein consists of the sequence set forth in SEQ ID NO: 6, 11, or 12.