WHAT IS CLAIMED IS:

1. A PD1-41BBL fusion protein, being characterized by a single amino acid linker between said PD1 and said 41BBL; a PD1 amino acid that is 123-166 amino acids in length;

a PD1 amino acid sequence comprising SEQ ID NO: 2; and/or

being in a form of at least a homo-trimer.

2. The PD1-41BBL fusion protein of claim 1, wherein the linker is glycine.

3. The PD1-41BBL fusion protein of any one of claims 1-2, wherein said fusion protein is capable of at least one of:

(i) binding PD-L1 and 41BB;

(ii) activating said 41BB signaling pathway in a cell expressing said 41BB; and/or

(iii)co-stimulating immune cells expressing said 41BB.

4. The PD1-41BBL fusion protein of any one of claims 1-3, wherein said PD1-41BBL fusion protein amino acid sequence comprises SEQ ID NO: 1.

5. A polynucleotide encoding the PD1-41BBL fusion protein of any one of claims 1-4.

6. A nucleic acid construct comprising the polynucleotide of claim 5, and a regulatory element for directing expression of said polynucleotide in a host cell.

7. A host cell comprising the PD1-41BBL fusion protein of any one of claims 1-4 or the polynucleotide or the nucleic acid construct of any one of claims 5-6.

8. A method of producing a PD1-41BBL fusion protein, the method comprising expressing in a host cell the polynucleotide or the nucleic acid construct of any one of claims 5-6.

9. The method of claim 8, comprising isolating the fusion protein.

10. The PD1-41BBL fusion protein of any one of claims 1-4, the polynucleotide or the nucleic acid construct of any one of claims 5-6 or the host cell of claim 7 for use in treating a disease that can benefit from activating immune cells.

11. The PD1-41BBL fusion protein, the polynucleotide, the nucleic acid construct or the host cell for use of claim 10, wherein said disease comprises a hyper-proliferative disease, a disease associated with immune suppression or medication induced immunosuppression or an infection.

12. An anti-cancer agent; and a PD1-41BBL fusion protein, a polynucleotide encoding same, a nucleic acid construct encoding same or a host cell expressing same for use in treating cancer.

13. The PD1-41BBL fusion protein, the polynucleotide, the nucleic acid construct or the host cell for use or the anti-cancer agent and the PD1-41BBL fusion protein, the polynucleotide, the nucleic acid construct or the host cell for use of any one of claims 10-12, wherein diseased cells express PD-L1.

14. A method of activating immune cells, the method comprising in-vitro activating immune cells in the presence of a PD1-41BBL fusion protein, a polynucleotide encoding same, a nucleic acid construct encoding same or a host cell expressing same.

15. The method of claim 14, wherein said activating is in the presence of cells expressing PD-L1 or exogenous PD-L1.