

WHAT IS CLAIMED IS:

1. A PD1-41BBL fusion protein in a form of at least a homo-trimer comprising a PD1 amino acid sequence capable of binding PD-L1 and a 41BBL amino acid sequence capable of at least binding 41BB, wherein said PD1 amino acid sequence is at least a fragment of SEQ ID NO: 10, said fragment being 123-166 amino acids in length and/or comprises SEQ ID NO: 2.
2. The PD1-41BBL fusion protein of claim 1, wherein said fusion protein comprises a single amino acid linker between said PD1 and said 41BBL.
3. The PD1-41BBL fusion protein of claim 2, wherein the linker is glycine.
4. The PD1-41BBL fusion protein of any one of claims 1-3, 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.
5. The PD1-41BBL fusion protein of any one of claims 1-4, wherein said PD1-41BBL fusion protein amino acid sequence comprises SEQ ID NO: 1.
6. A polynucleotide encoding the PD1-41BBL fusion protein of any one of claims 1-5.
7. A nucleic acid construct comprising the polynucleotide of claim 6, and a regulatory element for directing expression of said polynucleotide in a host cell.
8. A host cell comprising the PD1-41BBL fusion protein of any one of claims 1-5 or the polynucleotide or the nucleic acid construct of any one of claims 6-7.
9. A method of in-vitro 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 6-7.

10. The method of claim 9, comprising isolating the fusion protein.
11. The PD1-41BBL fusion protein of any one of claims 1-5, the polynucleotide or the nucleic acid construct of any one of claims 6-7 or the host cell of claim 8 for use in treating cancer.
12. The PD1-41BBL fusion protein, the polynucleotide, the nucleic acid construct or the host cell for use of claim 11, wherein diseased cells express PD-L1.
13. A method of activating immune cells, the method comprising in-vitro activating immune cells in the presence of the PD1-41BBL fusion protein of any one of claims 1-5, the polynucleotide or the nucleic acid construct of any one of claims 6-7 or the host cell of claim 8.
14. The method of claim 13, wherein said activating is in the presence of cells expressing PD-L1 or exogenous PD-L1.
15. Immune cells for use in adoptive transfer to a subject in need thereof, wherein said immune cells are obtainable by the method of any one of claims 13-14.