CLAIMS

What is claimed is:

1. A fusion molecule comprising a PD-L1 inhibitor fused to an IL-7 protein, through a peptide linker, wherein the IL-7 protein (a) comprises the amino acid sequence of SEQ ID NO:9 or an amino acid sequence having at least 90% sequence identity to SEQ ID NO: 9 or has an amino acid residue selected from G, A, V, C, L, I, M and F at position 142 of SEQ ID NO: 9; and (b) has reduced binding affinity to the IL-7 receptor alpha as compared to the wild-type human IL-7 protein.

2. The fusion molecule of claim 1, wherein the IL-7 protein has an amino acid residue that is not W at position 142 according to SEQ ID NO:9.

3. The fusion molecule of claim 1, wherein the IL-7 protein has an amino acid residue selected from G, A, V, C, L, I, M, and F at position 142 according to SEQ ID NO:9.

4. The fusion molecule of claim 1, wherein the IL-7 protein comprises the amino acid sequence of SEQ ID NO: 9.

5. The fusion molecule of any one of claims 1-4, wherein the peptide linker has from 5 to 100 amino acid residues.

6. The fusion molecule of claim 5, wherein the peptide linker has from 10-75 amino acids.

7. The fusion molecule of any one of claims 1-6, wherein at least 20% of the amino acid residues of peptide linker are amino acid residues selected from the group consisting of alanine, glycine, cysteine, and serine.

8. The fusion molecule of any one of claims 1-7, wherein at least 40% of the amino acid residues of peptide linker are amino acid residues selected from the group consisting of alanine, glycine, cysteine, and serine.

9. The fusion molecule of claim 1, wherein the peptide linker comprises an amino acid sequence selected from the group consisting SEQ ID NO: 1-5.