What is claimed is:

1. A recombinant *Listeria* strain comprising a minigene nucleic acid construct comprising an open reading frame encoding a chimeric protein, wherein the chimeric protein comprises:

(a) a bacterial secretion signal sequence;

(b) a ubiquitin protein; and

(c) a peptide,

wherein the bacterial secretion signal sequence, the ubiquitin protein, and the peptide in (a) to (c) are arranged from the amino-terminus to the carboxy-terminus of the chimeric protein.

2. The recombinant *Listeria* strain of claim 1, wherein the open reading frame encoding the chimeric protein is linked to a second open reading frame by a Shine-Dalgarno ribosome binding site nucleic acid sequence, wherein the second open reading frame encodes a second chimeric protein comprising: (a) a second bacterial secretion signal sequence; (b) a second ubiquitin protein; and (c) a second peptide, wherein the second bacterial secretion signal sequence, the second ubiquitin protein, and the second peptide in (a) to (c) are arranged from the amino terminus to the carboxy terminus of the second chimeric protein.

3. The recombinant *Listeria* strain of claim 2, wherein each open reading frame encodes a different peptide.

4. The recombinant *Listeria* strain of any one of claims 1-3, wherein the peptide comprises one or more neoepitopes.

5. The recombinant *Listeria* strain of any one of claims 1-4, wherein the minigene nucleic acid construct further comprises a 5’ bacterial promoter driving expression of the minigene nucleic acid construct.

6. The recombinant *Listeria* strain of claim 5, wherein the 5’ bacterial promoter is an *actA* promoter, an *hly* promoter, or a *p60* promoter.

7. The recombinant *Listeria* strain of any one of claims 1-6, wherein the bacterial secretion signal sequence comprises an $ActA_{100}$ signal sequence comprising the first 100 amino acids of an ActA protein signal sequence.

8. The recombinant *Listeria* strain of any one of claims 1-7, wherein the bacterial secretion signal sequence is a secretion signal sequence from a listeriolysin O (LLO) protein.

9. The recombinant *Listeria* strain of any one of claims 1-8, wherein the recombinant *Listeria* strain comprises genomic mutations or deletions in a D-alanine racemase (*dal*) gene and a D-amino acid transferase (*dat*) gene.

10. The recombinant *Listeria* strain of claim 9, wherein the recombinant *Listeria* strain further comprises a nucleic acid molecule comprising an open reading frame encoding a metabolic enzyme, and wherein the metabolic enzyme complements the genomic mutations or deletions in the *dal* gene and the *dat* gene.

11. The recombinant *Listeria* strain of claim 10, wherein the nucleic acid molecule is in a plasmid in the recombinant *Listeria* strain, and wherein the plasmid is stably maintained in the recombinant *Listeria* strain in the absence of antibiotic selection.

12. The recombinant *Listeria* strain of claims 10 or 11, wherein the metabolic enzyme is an alanine racemase enzyme or a D-amino acid transferase enzyme.

13. The recombinant *Listeria* strain of any one of claims 10-12, wherein the minigene nucleic acid construct is integrated into the *Listeria* genome or is in an extrachromosomal plasmid in the recombinant *Listeria* strain.

14. The recombinant *Listeria* strain of any one of claims 1-13, wherein the recombinant *Listeria* strain comprises a genomic mutation or deletion in the *actA* gene.

15. The recombinant *Listeria* strain of any one of claims 1-14, wherein the recombinant *Listeria* strain comprises a genomic mutation or deletion in the *inlB* gene.

16. The recombinant *Listeria* strain of any one of claims 1-15, wherein the recombinant *Listeria* strain comprises a genomic mutation or deletion in the *prfA* gene.

17. The recombinant *Listeria* strain of any one of claims 1-16, wherein the recombinant *Listeria* strain is a *Listeria monocytogenes*.

18. The recombinant *Listeria* strain of claim 1, wherein the bacterial secretion signal sequence is a secretion signal sequence from a listeriolysin O (LLO) protein and comprises SEQ ID NO: 4, wherein the recombinant *Listeria* strain comprises genomic mutations or deletions in a D-alanine racemase (*dal*) gene, a D-amino acid transferase (*dat*) gene, and an *actA* gene, wherein the recombinant *Listeria* strain further comprises a nucleic acid molecule comprising an open reading frame encoding a metabolic enzyme, and wherein the metabolic enzyme is an alanine racemase enzyme or a D-amino acid transferase enzyme.

19. A pharmaceutical composition comprising the recombinant Listeria strain of any one of claims 1-18, and a pharmaceutically acceptable carrier.

20. Use of a recombinant *Listeria* strain in the manufacture of a medicament for eliciting an anti-tumor or anti-cancer immune response in a subject having a tumor or cancer, wherein the recombinant *Listeria* strain comprises a minigene nucleic acid construct comprising an open reading frame encoding a chimeric protein, wherein the chimeric protein comprises:

(a) a bacterial secretion signal sequence;

(b) a ubiquitin protein; and

(c) a peptide,

wherein the bacterial secretion signal sequence, the ubiquitin protein, and the peptide in (a) to (c) are arranged from the amino-terminus to the carboxy-terminus of the chimeric protein.

21. The use of claim 20, wherein the open reading frame encoding the chimeric protein is linked to a second open reading frame by a Shine-Dalgarno ribosome binding site nucleic acid sequence, wherein the second open reading frame encodes a second chimeric protein comprising: (a) a second bacterial secretion signal sequence; (b) a second ubiquitin protein; and (c) a second peptide, wherein the second bacterial secretion signal sequence, the

second ubiquitin protein, and the second peptide in (a) to (c) are arranged from the amino terminus to the carboxy terminus of the second chimeric protein.

22. The use of claim 21, wherein each open reading frame encodes a different peptide.

23. The use of any one of claims 20-22, wherein the peptide comprises one or more neoepitopes.

24. The use of any one of claims 20-23, wherein the minigene nucleic acid construct further comprises a 5' bacterial promoter driving expression of the minigene nucleic acid construct.

25. The use of claim 24, wherein the 5' bacterial promoter is an *actA* promoter, an *hly* promoter, or a *p60* promoter.

26. The use of any one of claims 20-25, wherein the bacterial secretion signal sequence comprises an $ActA_{100}$ signal sequence comprising the first 100 amino acids of the ActA protein signal sequence.

27. The use of any one of claims 20-26, wherein the bacterial secretion signal sequence is a secretion signal sequence from a listeriolysin O (LLO) protein.

28. The use of any one of claims 20-27, wherein the recombinant *Listeria* strain comprises genomic mutations in a D-alanine racemase (*dal*) gene and a D-amino acid transferase (*dat*) gene.

29. The use of claim 24, wherein the recombinant *Listeria* strain further comprises a nucleic acid molecule comprising an open reading frame encoding a metabolic enzyme, and wherein the metabolic enzyme complements an endogenous gene that is deleted or mutated in a chromosome of the recombinant *Listeria* strain.

30. The use of claim 29, wherein the nucleic acid molecule is in a plasmid in the recombinant *Listeria* strain, and wherein the plasmid is stably maintained in the recombinant *Listeria* strain in the absence of antibiotic selection.

31. The use of claim 29 or 30, wherein the metabolic enzyme is an alanine racemase enzyme or a D-amino acid transferase enzyme.

32. The use of any one of claims 20-31, wherein the minigene nucleic acid construct is integrated into the *Listeria* genome or is in an extrachromosomal plasmid in the recombinant *Listeria* strain.

33. The use of any one of claims 20-32, wherein the recombinant *Listeria* strain comprises a genomic mutation in the *actA* gene.

34. The use of any one of claims 20-33, wherein the recombinant *Listeria* strain comprises a genomic mutation in the *inlB* gene.

35. The use of any one of claims 20-34, wherein the recombinant *Listeria* strain comprises a genomic mutation in the *prfA* gene.

36. The use of any one of claims 20-35, wherein the recombinant *Listeria* strain is a *Listeria monocytogenes*.

37. The use of any one of claims 20-36, wherein the medicament is for use in combination with an independent adjuvant.

38. The use of claim 37, wherein the adjuvant comprises a granulocyte/macrophage colony-stimulating factor (GM-CSF) protein, a nucleotide molecule encoding a GM-CSF protein, saponin QS21, monophosphoryl lipid A, or an unmethylated CpG-containing oligonucleotide.

39. The use of any one of claims 20-38, wherein the anti-tumor or anti-cancer immune response is a $CD8^+$ T cell immune response.

40. The use of any one of claims 20-39, wherein the medicament is for treating a tumor or cancer in the subject.

41. The use of any one of claims 20-40, wherein the cancer comprises a lymphoma, a leukemia, a breast cancer, a colorectal cancer, a head and neck squamous

carcinoma, a renal cell carcinoma, a pancreatic ductal adenocarcinoma, an osteosarcoma, a gastric cancer, a non-small cell lung cancer, a bone cancer, or a refractory cancer.

42. The use of claim 41, wherein the lymphoma is Hodgkin's lymphoma or non-Hodgkin's lymphoma.

43. The use of any one of claims 40-42, wherein the medicament is for administration following a relapse or metastasis of the cancer in the subject.

44. The use of any one of claims 40-43, wherein the medicament is for use as a booster shot.

45. The use of any one of claims 40-44, wherein the medicament delays metastatic disease, reduces lymph node size, results in progression-free survival, or increases the time to disease progression.

46. Use of the recombinant *Listeria* strain of any one of claims 1-18 in the manufacture of a medicament for suppressing or delaying formation of a tumor or cancer in a subject.

47. Use of the recombinant *Listeria* strain of any one of claims 1-18 in the manufacture of a medicament for breaking tolerance to a self-antigen in a subject.

48. Use of the recombinant *Listeria* strain of any one of claims 1-18 in the manufacture of a medicament for inducing cancer regression in a subject.

49. Use of the recombinant *Listeria* strain of any one of claims 1-18 in the manufacture of a medicament for for prolonging survival in a subject.

50. The use of any one of claims 20 and 46-69, wherein the bacterial secretion signal sequence is a secretion signal sequence from a listeriolysin O (LLO) protein and comprises SEQ ID NO: 4, wherein the recombinant *Listeria* strain comprises genomic mutations in a D-alanine racemase (*dal*) gene, a D-amino acid transferase (*dat*) gene, and an *actA* gene, wherein the recombinant *Listeria* strain further comprises a nucleic acid molecule comprising an

open reading frame encoding a metabolic enzyme, and wherein the metabolic enzyme is an alanine racemase enzyme or a D-amino acid transferase enzyme.