CLAIMS

1. A recombinant *Listeria* strain, said recombinant *Listeria* strain comprising an episomal plasmid comprising a recombinant nucleic acid, said nucleic acid comprising a first open reading frame encoding a recombinant polypeptide comprising an N-terminal fragment of an LLO protein fused to a heterologous antigen, and wherein said recombinant nucleic acid further comprises a second open reading frame encoding a mutant PrfA protein comprising an amino acid sequence of SEQ ID NO: 34.

2. The recombinant *Listeria* strain of claim 1, wherein said *Listeria* comprises a deletion, inactivation or mutation in the *prfA gene.*

3. The recombinant *Listeria* strain of any one of claims 1-2, wherein said mutant PrfA protein is encoded by SEQ ID NO: 33.

4. The recombinant *Listeria* strain of any one of claims 2-3, wherein said mutant PrfA protein encoded by said second open reading frame complements said *prfA* mutation, deletion or inactivation in said *Listeria* strain or restores partial PrfA function in said *Listeria* strain.

5. The recombinant *Listeria* strain of any one of claims 1-4, wherein said heterologous antigen is Human Papilloma Virus-E7 (HPV-E7) or HPV-E6.

6. The recombinant Listeria of claim 5, wherein said HPV-E7 is from HPV16.

7. The recombinant *Listeria* strain of any one of claims 1-6, wherein said N-terminal fragment of an LLO protein is selected from a sequence comprising SEQ ID NO: 2 or SEQ ID NO: 4, or wherein said N-terminal fragment of an LLO protein is a fragment of SEQ ID NO: 3.

8. The recombinant *Listeria* strain of any one of claims 1-7, wherein said recombinant *Listeria* strain is a recombinant *Listeria monocytogenes* strain.

9. The recombinant *Listeria* strain of any one of claims 1-8, wherein said recombinant *Listeria* strain has been passaged through an animal host before it is administered.

10. The recombinant *Listeria* strain of any one of claims 1-9, wherein said recombinant polypeptide is expressed by said recombinant *Listeria* strain.

11. The recombinant *Listeria* strain of any one of claims 1-10, wherein said plasmid comprises a gene encoding a metabolic enzyme.

12. A pharmaceutical composition comprising the recombinant *Listeria* strain of any one of claims 1-11.

13. Use of a recombinant *Listeria* strain in manufacture of a medicament for the treatment of inducing an immune response against a tumor or a cancer in a human subject, wherein the recombinant *Listeria* strain comprising an episomal plasmid comprising a recombinant nucleic acid, said nucleic acid comprising a first open reading frame encoding a recombinant polypeptide comprising an N-terminal fragment of an LLO protein fused to a heterologous antigen, wherein said recombinant nucleic acid further comprises a second open reading frame encoding a mutant PrfA protein comprising an amino acid sequence of SEQ ID NO: 34, thereby inducing an immune response against a tumor or a cancer.

14. The use of claim 13, wherein said *Listeria* strain comprises a deletion, inactivation or mutation in the *prfA gene.*

15. The use of any one of claims 13-14, wherein said mutant PrfA protein is encoded by SEQ ID NO: 33.

16. The use of any one of claims 13-15, wherein said mutant PrfA protein encoded by said second open reading frame complements a *prfA* mutation, deletion or inactivation in said *Listeria* strain or restores partial PrfA function in said *Listeria* strain.

17. The use of any one of claims 13-16, wherein said recombinant *Listeria* strain is to be administered intravenously or orally to said human subject.

18. The use of any one of claims 13-17, wherein said heterologous antigen is Human Papilloma Virus-E7 (HPV-E7) or HPV-E6.

19. The use of claim 18, wherein said HPV-E7 is from HPV16.

20. The use of any one of claims 13-19, wherein said N-terminal fragment of an LLO protein is selected from a sequence comprising SEQ ID NO: 2 or SEQ ID NO: 4, or wherein said N-terminal fragment of an LLO protein is a fragment of SEQ ID NO: 3.

21. The use of any one of claims 13-20, wherein said recombinant *Listeria* strain is to be administered to said human subject at a dose of 1×10^7 - 3.31×10^{10} organisms.

22. The use of claim 21, wherein said recombinant *Listeria* strain is stored in a frozen or lyophilized condition before it is to be administered to said human subject.

23. The use of any one of claims 13-22, wherein said recombinant *Listeria* strain is a recombinant *Listeria monocytogenes* strain.

24. The use of any one of claims 13-23, wherein said recombinant *Listeria* strain has been passaged through an animal host before it is administered to said human subject.

25. The use of any one of claims 13-24, wherein said recombinant polypeptide is expressed by said recombinant *Listeria* strain.

26. The use of any one of claims 13-25, wherein said plasmid comprises a gene encoding a metabolic enzyme.

27. The use of any one of claims 13-26, wherein the treatment further comprises boosting said human subject with said recombinant *Listeria* strain.

28. The use of any one of claims 13-27, wherein the treatment further comprises inoculating said human subject with an immunogenic composition that comprises or directs expression of E7 antigen.

29. The use of any one of claims 13-28, wherein said immune response is a cytotoxic T cell anti-tumor immune response.

30. The use of any one of claims 13-29, wherein said use of recombinant *Listeria* strain allows protecting a subject against a tumor or cancer.

31. The use of any one of claims 13-30, wherein said use of recombinant *Listeria* strain allows treating a subject against a tumor or cancer.

32. The use of claims 30-31, wherein said cancer is cervical cancer, head and neck cancer (HNC) or anal cancer.