CLAIMS:

1. A single guide RNA (sgRNA) that comprises a sequence of mU*mA*mA*AGCAUAGUGCAAUGGAUGUUUUAGAmGmCmUmAmGmAmAmAmU mAmGmCAAGUUAAAAUAAGGCUAGUCCGUUAUCAmAmCmUmUmGmAmAmAm AmAmGmUmGmGmCmAmCmCmGmAmGmUmCmGmGmUmGmCmU*mU*mU*mU (SEQ ID NO: 72),

wherein "mA," "mC," "mU," and "mG" represent nucleotides that have been substituted with 2′-O-Me and * indicates a phosphorothioate (PS) bond.

2. A composition comprising the sgRNA of claim 1, for use in a method of inserting a nucleic acid encoding a heterologous polypeptide into an albumin locus of a cell or cell population, wherein the method comprises delivering to the cell or cell population:

i) the sgRNA of claim 1;

ii) an RNA-guided DNA binding agent; and

iii) a construct comprising the nucleic acid encoding the heterologous polypeptide,

thereby inserting the nucleic acid encoding the heterologous polypeptide into an albumin locus of the cell or cell population.

3. The composition for use of claim 2, wherein the RNA-guided DNA binding agent is a Cas nuclease or a nucleic acid encoding the Cas nuclease.

4. The composition for use of claim 3, wherein the Cas nuclease is a class 2 Cas nuclease.

5. The composition for use of claim 3 or 4, wherein the Cas nuclease is Cas9.

6. The composition for use of any one of claims 2-5, wherein the construct comprises a polyadenylation signal sequence.

7. The composition for use of any one of claims 2-6, wherein the construct comprises a splice acceptor site.

8. The composition for use of any one of claims 2-7, wherein the heterologous polypeptide is a secreted polypeptide or intracellular polypeptide.

9. The composition for use of any one of claims 2-8, wherein the RNA-guided DNA binding agent is delivered as a nucleic acid encoding the RNA-guided DNA binding agent.

10. The composition for use of any one of claims 2-9, wherein the sgRNA, the RNA-guided DNA binding agent, and/or the construct comprising the nucleic acid encoding the heterologous polypeptide are delivered in a vector and/or a lipid nanoparticle.

11. The composition for use of claim 10, wherein the vector is a viral vector.

12. The composition for use of claim 11, wherein the viral vector is selected from the group consisting of adeno-associated viral (AAV) vector, adenovirus vector, retrovirus vector, and lentivirus vector.

13. The composition for use of any one of claims 2-12, wherein the sgRNA mediates target-specific cutting by the RNA-guided DNA binding agent, resulting in insertion of the nucleic acid encoding the heterologous polypeptide within intron 1 of an albumin gene.

14. The composition for use of claim 13, wherein the composition is for producing a rate of at least 2% insertion of the nucleic acid encoding the heterologous polypeptide in the cell population through target-specific cutting.

15. The composition for use of any one of claims 2-14, wherein the cell or cell population is a liver cell or cell population.

16. A composition comprising a single guide RNA (sgRNA) comprising a sequence of mU*mA*mA*AGCAUAGUGCAAUGGAUGUUUUAGAmGmCmUmAmGmAmAmAmU mAmGmCAAGUUAAAAUAAGGCUAGUCCGUUAUCAmAmCmUmUmGmAmAmAm AmAmGmUmGmGmCmAmCmCmGmAmGmUmCmGmGmUmGmCmU*mU*mU*mU (SEQ ID NO: 72),

wherein “mA,” “mC,” “mU,” and “mG” represent nucleotides that have been substituted with 2′-O-Me and * indicates a phosphorothioate (PS) bond,

for use in a method of inserting a nucleic acid encoding a heterologous polypeptide into an albumin locus of a cell or cell population in a subject, the method comprising administering to the subject:

i) the single guide RNA (sgRNA);

ii) an RNA-guided DNA binding agent; and

iii) a construct comprising the nucleic acid encoding the heterologous polypeptide,

thereby inserting the nucleic acid encoding the heterologous polypeptide into an albumin locus of the cell or cell population.

17. The composition for use of claim 16, wherein the RNA-guided DNA binding agent is a Cas9 or a nucleic acid encoding a Cas9.

18. The composition for use of claim 16 or 17, wherein the RNA-guided DNA binding agent is administered as a nucleic acid encoding the RNA-guided DNA binding agent.

19. The composition for use of claim 18, wherein the nucleic acid encoding the RNA-guided DNA binding agent is an mRNA.

20. The composition for use of claim 19, wherein the mRNA is a modified mRNA.

21. The composition for use of any one of claims 16-20, wherein the RNA-guided DNA binding agent is a Cas nuclease or a nucleic acid encoding the Cas nuclease.

22. The composition for use of claim 21, wherein the Cas nuclease is Cas9.

23. The composition for use of claim 21 or 22, wherein the Cas nuclease is an *S. pyogenes* Cas9 nuclease.

24. The composition for use of any one of claims 16-23, wherein the construct comprises a polyadenylation signal sequence.

25. The composition for use of any one of claims 16-24, wherein the construct comprises a splice acceptor site.

26. The composition for use of any one of claims 16-25, wherein the construct does not comprise a homology arm.

27. The composition for use of any one of claims 16-26, wherein the sgRNA is administered in a vector and/or a lipid nanoparticle.

28. The composition for use of any one of claims 16-27, wherein the RNA-guided DNA binding agent is administered in a vector and/or a lipid nanoparticle.

29. The composition for use of any one of claims 16-28, wherein the construct comprising the nucleic acid encoding the heterologous polypeptide is administered in a vector and/or a lipid nanoparticle.

30. The composition for use of any one of claims 27-29, wherein the vector is a viral vector.

31. The composition for use of claim 30, wherein the viral vector is selected from the group consisting of adeno-associated viral (AAV) vector, adenovirus vector, retrovirus vector, and lentivirus vector.

32. The composition for use of any one of claims 16-31, wherein the sgRNA mediates target-specific cutting by the RNA-guided DNA binding agent, resulting in insertion of the nucleic acid encoding the heterologous polypeptide within intron 1 of an albumin gene.

33. The composition for use of claim 32, wherein the composition is for producing a rate of at least 2% insertion of the nucleic acid encoding the heterologous polypeptide in the cell population through target-specific cutting.

34. The composition for use of any one of claims 16-33, wherein the sgRNA and/or the RNA-guided DNA binding agent are administered in a lipid nanoparticle.

35. The composition for use of any one of claims 16-34, wherein the sgRNA and the RNA-guided DNA-binding agent are administered as a ribonucleoprotein (RNP).

36. A vector comprising the sgRNA of claim 1.

37. The vector of claim 36, wherein the vector is a viral vector.

38. A lipid nanoparticle comprising the sgRNA of claim 1.

39. A cell comprising the sgRNA of claim 1.

40. A composition comprising the sgRNA of claim 1, for use in a method of inserting a nucleic acid encoding a heterologous polypeptide into an albumin locus of a cell or cell population.

41. A composition comprising the sgRNA of claim 1, for use in a method of inserting a nucleic acid encoding a heterologous polypeptide into an albumin locus of a cell or cell population in a subject.

42. A kit or composition comprising:
i) the sgRNA of claim 1;
ii) an RNA-guided DNA binding agent; and
iii) a construct comprising a nucleic acid encoding a heterologous polypeptide.

43. An *in vitro* method of inserting a nucleic acid encoding a heterologous polypeptide into an albumin locus of a cell or cell population, wherein the method comprises delivering to the cell or cell population, the sgRNA, the vector, the lipid nanoparticle, or the composition of any one of claims 1, 36, 37, 38 and 42.

44. The sgRNA, the vector, the lipid nanoparticle, or the composition of any one of claims 1, 36, 37, 38 and 42, for use in therapy.

45. Use of the sgRNA, the vector, the lipid nanoparticle, or the composition of any one of claims 1, 36, 37, 38 and 42, in the manufacture of a medicament for treating a liver-associated disease.

46. The use of claim 45, wherein the liver-associated disease is selected from the group consisting of tyrosinemia, Wilson's disease, Tay-Sachs disease, hyperbilirubinema (Crigler-Najjar), acute intermitent porphyria, citrullinemia type 1, progressive familiar intrahepatic cholestasis, and maple syrup urine disease.