WHAT IS CLAIMED IS:

1. A recombinant nucleic acid molecule comprising:

a negative strand nucleic acid molecule or a pgRNA nucleic acid molecule encoding a chemokine, a cytokine, an apoptosis inducing protein, diphtheria toxin A (or a fragment thereof), or any combination thereof, flanked by a first and second viral transcription recognition signal;

a first promoter upstream (5') of the first viral transcription recognition signal; and

a second promoter adjacent and 5' to the negative strand nucleic acid molecule or pgRNA nucleic acid molecule encoding a chemokine, a cytokine, an apoptosis inducing protein, diphtheria toxin A (or a fragment thereof), or any combination thereof.

2. The recombinant nucleic acid molecule of claim 1, wherein the negative strand nucleic acid molecule is negative sense RNA, negative sense DNA, single or double strand DNA that expresses a non-coding, negative sense RNA, or any combination thereof.

3. The recombinant nucleic acid molecule of claim 1 or 2, wherein the first and second viral transcription recognition signal is selected from a virus selected from a negative strand virus, an RNA reverse transcribing virus, or a DNA reverse transcribing virus.

4. The recombinant nucleic acid molecule of any one of claims 1-3, further comprising a poly A tail downstream (3') of the negative strand nucleic acid molecule or pgRNA nucleic acid molecule encoding a chemokine, a cytokine, an apoptosis inducing protein, or combination thereof.

5. The recombinant nucleic acid molecule of any one of claims 1-4, wherein the apoptosis inducing protein is selected from the group consisting of BAX, BID, BAK, BAD, caspase 2, caspase 8, caspase 9, caspase 10, caspase 11, caspase 12, cytochrome C, SMAC, and apoptosis-inducing factor, or any combination thereof.

6. The recombinant nucleic acid molecule of any one of claims 1-5, wherein the first promoter comprises a strong ubiquitous promoter or a liver-tissue-specific promoter, selected from the group consisting of TBG (Thyroxine Binding Globulin), albumin promoter and/or enhancing element, AFP (alpha-fetoprotein) promoter, AAT (Alpha-1-antitrypsin) promoter, ApoE (Apolipoprotein E) promoter or PEPCK (Phosphoenolpyruvate carboxykinase) promoter.

7. The recombinant nucleic acid molecule of any one of claims 1-6, wherein the second promoter comprises elongation factor 1 alpha binding sequence (EFS).

8. The recombinant nucleic acid molecule of any one of claims 1-7, wherein the chemokine is selected from CCL1, CCL2, CCL3, CCL4, CCL5, CCL6, CCL7, CCL8, CCL9, CCL10, CCL11, CCL12, CCL13, CCL14, CCL15, CCL16, CCL17, CCL18, CCL19, CCL20, CCL21, CCL22, CCL23, CCL24, CCL25, CCL26, CCL27, CCL28, CXCL1, CXCL2, CXCL8, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL15, CXCL16, CXCL17, XCL1, XCL2, and CX3CL1.

9. The recombinant nucleic acid molecule of any one of claims 1-8, wherein the cytokine is selected from the group consisting of IL-15, IL-2, IL-8, IL-10, IL-12, IL-6, IFN-α, IFN-β, IFN-γ, TNF- α, CD40L, Mig, and Crg-2.

10. The recombinant nucleic acid molecule of claim 3, wherein the viral transcription recognition signal comprises epsilon recognition signal as set forth in SEQ ID NO:1 or a corona virus recognition sequence selected from the group consisting of: SEQ ID: 25, SEQ ID: 26, SEQ ID: 28, and SEQ ID: 30.

11. The recombinant nucleic acid molecule of claim 3, wherein the virus is corona virus, Hepatitis B virus, Hepatitis D virus, ebola virus, Marburg virus, human parainfluenza virus 1, measles virus, mumps virus, human respiratory syncytial virus, vesicular stomatitis Indiana virus, rabies virus, bovine ephemeral fever virus, lymphocytic choriomeningitis virus, Bunyamwera virus, Hantaan virus, Nairobi sheep disease virus, sandfly fever Sicilian virus,

influenza virus A, influenza virus C, Thogoto virus, mouse mammary tumor virus, murine leukemia virus, avian leukosis virus, Mason-Pfizer monkey virus, bovine leukemia virus, human immunodeficiency virus 1, human spumavirus, duck hepatitis B virus, coronavirus, and any combination thereof.

12. A vector comprising the recombinant nucleic acid sequence of any one of claims 1-11.

13. The vector of claim 12, wherein the vector comprises a delivery vector or vehicle for delivery to a mammalian cell.

14. The delivery vector or vehicle of claim 13, wherein the vector or vehicle comprises a VLP, an adeno-associated virus (AAV), a liposome, a nanoparticle, a micelle, a polymeric vesicle, or a polymersome.

15. A pharmaceutical composition comprising any one of the recombinant nucleic acid sequences of any one of claims 1-11 or a vector of any one of claims 12-14.

16. A replication incompetent virus-like particle (VLP) comprising:

an optional translocation motif (TLM) fused to a capsid protein from a hepatitis B viral capsid or a hepatitis D viral capsid or coronavirus fusion protein; and

a negative strand nucleic acid molecule or a pgRNA nucleic acid molecule encoding a chemokine, a cytokine, a apoptosis inducing protein, diphtheria toxin A (or a fragment thereof), or any combination thereof, flanked by a first and second viral transcription recognition signal;

a first promoter upstream (5') of the first viral transcription recognition signal; and

a second promoter adjacent and 5' to the negative strand nucleic acid molecule or pgRNA nucleic acid molecule encoding a chemokine, a cytokine, a apoptosis inducing protein, diphtheria toxin A (or a fragment thereof), or any combination thereof.

17. A replication incompetent virus-like particle (VLP) comprising:

a negative strand nucleic acid molecule or a pgRNA nucleic acid molecule encoding a chemokine, a cytokine, a apoptosis inducing protein, diphtheria toxin A (or a fragment thereof), or any combination thereof, flanked by a first and second target viral transcription recognition signal;

a first promoter upstream (5') of the first viral transcription recognition signal; and

a second promoter adjacent and 5' to the negative strand nucleic acid molecule or pgRNA nucleic acid molecule encoding a chemokine, a cytokine, a apoptosis inducing protein, diphtheria toxin A (or a fragment thereof), or any combination thereof, wherein the VLP exhibits tropism for the target virally infected cells.

18. A pharmaceutical composition comprising the replication incompetent virus-like particle of claim 16 or 17.

19. Use of the recombinant nucleic acid molecule of any one of claims 1-11, the vector of any one of claims 12-14, the pharmaceutical composition of claim 15 or 18, or the replication incompetent virus-like particle of claim 16 or 17 in the preparation of a medicament for treating a viral infection in a subject in need thereof,

wherein the viral infection is:

an infection from a virus classified under Baltimore Classification IV, V, VI, or VII;

an infection from a virus selected from the group consisting of coronavirus, Hepatitis B virus, Hepatitis D virus, ebola virus, Marburg virus, human parainfluenza virus 1, measles virus, mumps virus, human respiratory syncytial virus, vesicular stomatitis Indiana virus, rabies virus, bovine ephemeral fever virus, lymphocytic choriomeningitis virus, Bunyamwera virus, Hantaan virus, Nairobi sheep disease virus, sandfly fever Sicilian virus, influenza virus A, influenza virus C, Thogoto virus, mouse mammary tumor virus, murine leukernia virus, avian leukosis virus, Mason-Pfizer monkey virus, bovine leukemia virus, human immunodeficiency virus 1, human spumavirus, duck hepatitis B virus, and a combination thereof; or

an infection from a virus selected from the group consisting of filovirus, paramyxovirus, morbillivirus, rubulavirus, pneumovirus, vesiculovirus, lyssavrius, ephemerovirus, arenavirus, bunyavirus, hantavirus, nairovirus, phlebovirus, Orthohepadnavirus, Avihepadnavirus,

Mammalian type B retroviruses, Mammalian type C retroviruses, Avian type C retroviruses, Type D retroviruses, BLV-HTLV retroviruses, Lentivirus, Spumavirus, and a combination thereof.

20. Use of the recombinant nucleic acid molecule of any one of claims 1-11, the vector of any one of claims 12-14, the pharmaceutical composition of claim 15 or 18, or the replication incompetent virus-like particle of claim 16 or 17 in the preparation of a medicament for inducing an apoptotic response against a cell infected with a virus in a subject in need thereof.

21. Use of the recombinant nucleic acid molecule of any one of claims 1-11, the vector of any one of claims 12-14, the pharmaceutical composition of claim 15 or 18, or the replication incompetent virus-like particle of claim 16 or 17 in the preparation of a medicament for treating a hepatitis B, influenza, or coronavirus infection in a subject in need thereof.