CLAIMS

What we claim is:

1. A composition or vaccine comprising a recombinant Equine Herpesvirus -1 (EHV-1), wherein the EHV-1 comprises a mutated non-functional Glycoprotein C (gC) gene.
2. The composition or vaccine of claim 1, wherein the mutated Glycoprotein C (gC) gene encodes a mutated gC protein, and wherein the N-terminal region of the gC protein is deleted.
3. The composition or vaccine of claim 1, wherein the gC gene is deleted.
4. The composition or vaccine of any one of claims 1-3, wherein the recombinant EHV-1 comprises a DNA polymerase (Pol) comprising an asparagine (N) at the amino acid position 752.
5. A composition or vaccine comprising a recombinant EHV-1, wherein the EHV-1 comprises a DNA polymerase (Pol) gene encoding a Pol comprising an asparagine (N) at the amino acid position 752.
6. The composition or vaccine of any one of claims 1-5, wherein the EHV-1 is derived from an EHV-1 strain selected from the group consisting of the RacH strain, the RacL strain, the Ab4 strain, the V592 strain, the Kentucky D strain, the 438/77 strain, the AB69 strain, the EHV-1 NY03 strain, and a combination thereof.
7. The composition or vaccine of any one of claims 1-6, wherein the EHV-1 is derived from the EHV-1 RacL strain, and wherein the DNA polymerase (Pol) of RacL comprises an asparagine (N) at the amino acid position 752.
8. The composition or vaccine of any one of claims 1-7 further comprising a pharmaceutically or veterinary acceptable vehicle, diluent, adjuvant, or excipient.
9. A recombinant EHV-1 comprising a mutated gC gene.
10. The recombinant EHV-1 of claim 9, wherein the mutated Glycoprotein C (gC) gene encodes a mutated gC protein, and wherein the N-terminal region of the gC protein is deleted.
11. The recombinant EHV-1 of claim 9, wherein the gC gene is deleted.

12. The recombinant EHV-1 of any one of claims 9-11, wherein the recombinant EHV-1 comprises a DNA polymerase (Pol) gene encoding a Pol comprising an asparagine (N) at the amino acid position 752.
13. A recombinant EHV-1, wherein the recombinant EHV-1 comprises a DNA polymerase (Pol) gene encoding a Pol comprising an asparagine (N) at the amino acid position 752.
14. The recombinant EHV-1 of any one of claims 9-13, wherein the EHV-1 is derived from an EHV-1 strain selected from the group consisting of the RacH strain, the RacL strain, the Ab4 strain, the V592 strain, the Kentucky D strain, the 438/77 strain, the AB69 strain, the EHV-1 NY03 strain, and a combination thereof.
15. The recombinant EHV-1 of claim 14, wherein the EHV-1 is derived from the EHV-1 RacL strain.
16. A method of vaccinating an animal comprising at least one administration of the composition or recombinant EHV-1 of any one of claims 1-15.
17. The method of claim 16, wherein the method comprises a prime-boost administration regime.
18. A method of eliciting a protective response in an animal against Herpesvirus comprising administering to the animal the composition or recombinant EHV-1 of any one of claims 1-15 and a pharmaceutically or veterinarily acceptable carrier, adjuvant, excipient or vehicle.
19. The method of any one of claims 16-18, wherein the animal is equine.
20. An isolated polynucleotide encoding a polypeptide having at least 99% sequence identity to SEQ ID NO:35.
21. An isolated polynucleotide having at least 99% sequence identity to SEQ ID NO:34.

Claims

1. An immunogenic composition comprising a recombinant Equine Herpesvirus -1 (EHV-1), wherein the EHV-1 comprises a mutated glycoprotein C (gC) gene which does not encode functional gC protein, wherein the entire gC gene is deleted and wherein the recombinant EHV-1 comprises a DNA polymerase (Pol) comprising an asparagine (N) at the amino acid position 752 when compared to SEQ ID NO: 2 or 37 from the starting methionine.

2. The composition of claim 1, wherein the EHV-1 is derived from the RacL strain.

3. The composition of claim 1, further comprising a pharmaceutically or veterinarily acceptable vehicle, diluent, adjuvant, or excipient.

4. The composition of claim 2, further comprising a pharmaceutically or veterinarily acceptable vehicle, diluent, adjuvant, or excipient.

5. A recombinant EHV-1 comprising a mutated gC gene, wherein the entire gC gene is deleted, and wherein the recombinant EHV-1 comprises a DNA polymerase (Pol) gene encoding a Pol comprising an asparagine (N) at the amino acid position 752 when compared to SEQ ID NO: 2, 4, 6, or 37 from the starting methionine.

6. The recombinant EHV-1 of claim 5, wherein the EHV-1 is derived from the RacL strain.