What is claimed is:

1. A method for purifying a sample comprising a peptide or protein and viral particles, the method comprising:

subjecting the sample to increasing ionic strength by addition of a salt, wherein the concentration of the salt is from 1mM to 100 mM;

subjecting the sample to an acidic pH of less than or equal to pH 3.90; and

subsequently maintaining the sample at the ionic strength condition and the pH condition for at least 15 minutes to inactivate a quantity of viral particles;

wherein the viral particles are retrovirus-like particles, and

wherein the peptide or protein comprises an antibody, an antibody fragment, a Fab region of an antibody, antibody-drug conjugate, or a fusion protein.

2. The method of claim 1, wherein the quantity of the viral particle inactivation is at least 3 LRF (logarithmic reduction factor).

3. The method of claim 1, wherein the quantity of the viral particle inactivation is at least 4 LRF (logarithmic reduction factor).

4. The method of claim 1, wherein the pH condition of the sample is in a range of from pH 3.60 to pH 3.90.

5. The method of claim 1, wherein the pH condition of the sample is in a range of from pH 3.65 to pH 3.80.

6. The method of claim 1, wherein the peptide or protein is an antibody produced in a host-cell.

7. The method of claim 1, wherein the sample is maintained at the ionic strength condition and the pH condition for at least 30 minutes to inactivate the quantity of the viral particles.

8. The method of claim 1, wherein the sample is maintained at the ionic strength condition and the pH condition for from 15 minutes to 30 minutes to inactivate the quantity of the viral particles.

9. The method of claim 1 further comprising optimizing the ionic strength and the pH condition of the sample for inactivation of the quantity of the viral particles by running a D-Optimal design of experiment.

10. The method of claim 9, wherein the D-Optimal design of experiment evaluates the pH condition of the sample and the ionic strength of the sample and adjusts the pH condition of the sample and the ionic strength of the sample to inactivate the quantity of viral particles.

11. The method of claim 10, wherein the D-Optimal design of experiment further evaluates and adjusts one or more of:

a conductivity of the sample;

a type of the peptide or protein;

a temperature of the sample;

an acid titrant to adjust the pH condition of the sample;

a method for spiking the viral particles to the sample; or

a presence of a post-spike filtration.

12. The method of claim 1, wherein the sample is an eluent from protein A chromatography.

13. The method of claim 1, wherein the salt is sodium chloride.

14. The method of claim 1, wherein the concentration of the salt is 25 mM, 50 mM, or 100 mM.

15. The method of claim 1, wherein the pH condition of the sample is adjusted using phosphoric acid or glycine HCl.

16. The method of claim 1, wherein the peptide or protein is an antibody having an IgG1 isotype or having an IgG4 isotype.

17. The method of claim 1, wherein the peptide or protein is a monoclonal antibody or a bispecific antibody.

18. A method of producing a preparation comprising a protein of interest and a reduced amount of viral particles from a sample having the protein of interest and an infectious viral particle, comprising:

subjecting the sample to a pH in a range of from pH 3.60 to pH 4.0;

subjecting the sample to an increase in ionic strength condition by addition of a salt to the sample, wherein a concentration of the salt ranges from 1mM to 100 mM; and

maintaining the sample at the pH and ionic strength condition for an appropriate amount of time to produce the preparation comprising the protein of interest and the reduced amount of infectious viral particles,

wherein the protein of interest comprises a recombinant protein, an antibody, a bispecific antibody, a multispecific antibody, an antibody fragment, a monoclonal antibody, a fusion protein, or an ScFv protein.

19. The method of claim 18, wherein the concentration of the protein of interest in the sample is greater than 25 g/L.

20. The method of claim 18, wherein the appropriate amount of time is 15 minutes, 20 minutes, 25 minutes, or 30 minutes.

21. The method of claim 18, wherein the method reduces the amount of infectious viral particles from the sample by 3 LRF (logarithmic reduction factor).

22. The method of claim 18, wherein the method reduces the amount of infectious viral particles from the sample by 4 LRF (logarithmic reduction factor).

23. The method of claim 18, wherein the pH condition of the sample is greater than pH 3.70, 3.80, pH 3.90.

24. The method of claim 18, wherein the sample is an eluent from protein A chromatography.

25. The method of claim 18, wherein the salt is sodium chloride.

26. The method of claim 18, wherein the concentration of the salt is greater than 50 mM, or 100 mM.

27. The method of claim 18, wherein the pH condition of the sample is adjusted using phosphoric acid or glycine HCl.

28. The method of claim 1, wherein

the concentration of the salt is 25 mM, 50 mM, or 100 mM;

the sample is subjected to the acidic pH by a concentration of phosphoric acid or glycine HCl of 0.25 M; and

the quantity of the viral particle inactivation is at least 3 LRF (logarithmic reduction factor).

29. The method of claim 18, wherein

the concentration of the salt is 25 mM, 50 mM, or 100 mM;

the sample is subjected to the pH by a concentration of phosphoric acid or glycine HCl of 0.25 M; and

the amount of infectious viral particles in the sample is reduced by at least 3 LRF (logarithmic reduction factor).

30. The method of claim 5, wherein adjusting the pH condition of the sample and the ionic strength of the sample to inactivate a quantity of viral particles comprises inactivating the quantity of viral particles by at least 4 LRF (logarithmic reduction factor).

31. The method of claim 18, wherein the infectious viral particles comprise XMuLV.