What is claimed is:

1. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:

dissociating the host-cell protein from the protein of interest;

filtering the dissociated host-cell protein using a molecular weight cut-off filter with a cutoff of at least 30 kDa to obtain a filtrate including the host cell protein;

centrifuging the host-cell protein;

contacting the filtered host-cell protein to a hydrolyzing agent to digest the host-cell protein; and

identifying the host-cell protein.

2. The method of claim 1, wherein the protein dissociation is carried out using a protein dissociating agent.

3. The method of claim 1 further comprising contacting the filtered host-cell protein to a protein reducing agent.

4. The method of claim 1 further comprising contacting the filtered host-cell protein to a protein alkylating agent.

5. The method of claim 1 further comprising centrifuging the filtered host-cell protein.

6. The method of claim 1, further comprising ~~further comprises~~ centrifuging the host-cell protein at about 13000 rpm for about 8 minutes.

7. The method of claim 1, wherein the protein of interest is an antibody.

8. The method of claim 1, wherein the protein of interest is a therapeutic antibody.

9. The method of claim 1, wherein the identification of the host-cell protein ~~of step (c)~~ is carried out using a mass spectrometer.

10. The method of claim 9, wherein the mass spectrometer is coupled to a liquid chromatography system.

11. The method of claim 10, wherein the liquid chromatography system is a nano liquid chromatography system.

12. The method of claim 9, wherein the mass spectrometer is a tandem mass spectrometer.

13. The method of claim 2, wherein the protein dissociating agent comprises sodium deoxycholate.

14. The method of claim 2, wherein the protein dissociating agent comprises N-lauroylsarcosine.

15. The method of claim 1, wherein the ~~protein~~ hydrolyzing agent is trypsin.

16. The method of claim 3, wherein the protein reducing agent is tris(2-carboxy-ethyl)phosphine (TCEP~~.~~).

17. The method of claim 4, wherein the protein alkylating agent is chloroacetamide (CAA~~.~~).

18. The method of claim 1, wherein the molecular weight cut-off filter has a cutoff of about 100 KDa.

19. The method of claim 1, wherein the molecular weight cut-off filter has a cutoff of about 50 KDa.

20. The method of claim ~~1~~2, wherein the protein dissociating agent is degradable.

21. The method of claim 1, wherein a detection limit of the host-cell protein is at least ~~about 1 ppm~~1 ppm after filtering the dissociated host-cell protein using a molecular weight cut-off filter.

22. The method of claim 1, wherein the filtering step enriches the dissociated host-cell protein by at least ~~about~~ 50-fold as compared to the sample matrix.

23. The method of claim 1, wherein a detection limit of a host-cell protein is at least ~~about~~ 5-fold greater than a detection limit of another method not comprising a step for filtering the dissociated host-cell protein using a molecular weight cut-off filter.

24. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:

dissociating the host-cell protein from the protein of interest;

filtering the dissociated host-cell protein using a molecular weight cut-off filter at least 30 kDa to obtain a filtrate including the host cell protein; and

identifying the host-cell protein.

25. The method of claim ~~25~~24, wherein the filtering step enriches the dissociated host-cell protein by at least ~~about~~ 50-fold as compared to the sample matrix.

26. The method of claim ~~25~~24, wherein the identification of the host-cell protein is carried out using a mass spectrometer.

27. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:

dissociating the host-cell protein from the protein of interest using a protein dissociating agent;

filtering the dissociated host-cell protein using a molecular weight cut-off filter at least 30 kDa to obtain a filtrate including the host cell protein; and

identifying the host-cell protein.

~~28. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:~~

~~dissociating the host-cell protein from the protein of interest using a protein dissociating agent;~~

~~filtering the dissociated host-cell protein using a molecular weight cut-off filter; and~~

~~identifying the host-cell protein using a mass spectrometer.~~

2829. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:

dissociating the host-cell protein from the protein of interest using a protein dissociating agent;

filtering the dissociated host-cell protein using a molecular weight cut-off filter, at least 30 kDa, to obtain a filtrate including the host cell protein, wherein the filtering enriches the dissociated host-cell protein by at least ~~about~~ 50-fold; and

identifying the host-cell protein.

~~30. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:~~

~~dissociating the host-cell protein from the protein of interest using a protein dissociating agent;~~

~~filtering the dissociated host-cell protein using a molecular weight cut-off filter wherein the filtering enriches the dissociated host-cell protein by at least about 50-fold; and~~

~~identifying the host-cell protein using a mass spectrometer.~~

~~31. A method for identifying a host-cell protein in a sample matrix having a protein of interest, comprising:~~

~~dissociating the host-cell protein from the protein of interest using a protein dissociating agent;~~

~~filtering the dissociated host-cell protein using a molecular weight cut-off filter, wherein the filtering enriches the dissociated host-cell protein by at least about 50-fold;~~

~~contacting the filtered host-cell protein to a hydrolyzing agent; and~~

~~identifying the host-cell protein using a mass spectrometer.~~

~~32. A method for identifying a host-cell protein in a sample matrix, comprising:~~

~~contacting the sample matrix having the host-cell protein to a protein dissociating agent;~~

~~filtering the dissociated host-cell protein using a molecular weight cut-off filter;~~

~~contacting the filtered host-cell protein to a hydrolyzing agent; and~~

~~identifying the host-cell protein.~~

29~~33~~. A method for identifying a host-cell protein in a sample matrix, comprising:

contacting the sample matrix having the host-cell protein and a protein of interest to a protein dissociating agent, wherein the protein dissociating agent denatures the protein of interest;

filtering the host-cell protein using a molecular weight cut-off filter of at least 30 kDa to obtain a filtrate including the host cell protein;

contacting the filtered host-cell protein to a hydrolyzing agent to digest the host-cell protein; and

identifying the host-cell protein.