What is claimed is:

1. A method for identifying at least one protein, said method comprising:

contacting a sample including the protein to a chromatographic system having a protein A chromatography resin;

washing said protein A chromatography resin using a mobile phase to provide an ~~eluent~~eluate including the protein, wherein said mobile phase comprises ammonium acetate; and

identifying the protein in said ~~eluent~~eluate using an electrospray ionization mass spectrometer run under native conditions,

wherein at least one splitter with at least three paths is used to directly couple said chromatographic system with said mass spectrometer and with an ultraviolet detector.

2. The method of claim 1, wherein the electrospray ionization mass spectrometer is coupled online to the chromatographic system having the protein A chromatography resin.

3. The method of claim 1, wherein the electrospray ionization mass spectrometer is a nano-electrospray ionization mass spectrometer.

4. The method of claim 1, wherein ~~a splitter with at least two paths is used to couple the electrospray ionization mass spectrometer to the chromatographic system having the protein A chromatography resin.~~

~~5. The method of claim 1, wherein a splitter with at least two paths is used to couple an ultraviolet detector to the chromatographic system having the protein A chromatography resin.~~

~~6. The method of claim 1, wherein the mobile phase used to wash the size-exclusion chromatography resin comprises ammonium acetate.~~

~~7. The method of claim 1, wherein the mobile phase used to wash the size-exclusion chromatography resin comprises a volatile salt.~~

~~8. The method of claim 1, wherein~~ the mobile phase used to wash the protein A chromatography resin has a flow rate of ~~about~~from 0.2 mL/min to ~~about~~ 0.4 mL/min.

~~9~~5. The method of claim 1, wherein an amount of the sample including the protein contacted to the chromatography system is ~~about~~from 10 µg to ~~about~~ 100 µg.

~~10~~6. The method of claim 1, wherein the ~~eluent~~eluate provided from washing the protein A chromatography resin is introduced in the electrospray ionization mass spectrometer, wherein a flow rate of electrospray from the electrospray ionization is ~~about~~from 10 nL/min to ~~about~~ 50 nL/min.

~~11~~7. The method of claim 1, wherein the ~~eluent~~eluate provided from washing the protein A chromatography resin is introduced in the electrospray ionization mass spectrometer, wherein a spray voltage of electrospray is ~~about~~from 0.8 kV to ~~about~~ 1.5 kV.

~~12~~8. The method of claim 1, wherein the protein is a monoclonal antibody.

~~13~~9. The method of claim 1, wherein the protein is a product-related impurity.

~~14~~10. The method of claim 1, wherein the protein is a bispecific antibody.

~~15~~11. The method of claim 1, wherein the protein is an impurity~~.~~

~~16. The method~~ in the manufacture of ~~claim 1, wherein the protein is~~ a ~~monoclonal antibody variant.~~ biopharmaceutical product.

~~17~~12. The method of claim 1, wherein the protein is a monoclonal antibody variant.

13. The method of claim 1, wherein the sample comprises at least two proteins.

~~18~~14. The method of claim 1, wherein the protein has ~~a~~at least one post-translational modification.

~~19~~15. The method of claim 1, wherein the sample is subjected to a condition selected from the group consisting of deglycosylation, oxidation, heat, ultraviolet light, cool-white light, or combinations thereof.

~~20~~16. A system for identifying at least one protein, comprising:

a chromatographic column having a protein A chromatography resin, wherein the chromatographic column is capable of receiving a mobile phase and a sample including a protein, and

an electrospray ionization mass spectrometer, wherein the ~~electrospray ionization mass spectrometer~~ chromatographic column is ~~capable of being~~ coupled online to said ~~chromatographic column~~mass spectrometer and to an ultraviolet detector using a splitter with at least three paths, and wherein the electrospray ionization mass spectrometer is capable of being run under native conditions.

~~21. The system of claim 20, wherein the chromatographic column is further capable of being coupled to an ultraviolet detector using a splitter with at least three paths.~~

~~22. The system of claim 20~~17. The system of claim 16, wherein the electrospray ionization mass spectrometer is a nano-electrospray ionization mass spectrometer.

~~23~~18. The system of claim ~~20~~16, wherein the system is capable of identifying the protein.

~~24~~19. The system of claim ~~20~~16, wherein the system is capable of ranking protein A affinity of monoclonal antibody variants.

~~25~~20. A method for characterizing at least one protein, said method comprising:

contacting a sample including the protein to a chromatographic system having a protein A chromatography resin;

washing said protein A chromatography resin using a mobile phase to provide an ~~eluent~~eluate including the protein, wherein said mobile phase comprises ammonium acetate; and

~~identifying~~characterizing the protein in said ~~eluent~~eluate using an electrospray ionization mass spectrometer run under native conditions,

wherein at least one splitter with at least three paths is used to directly couple said chromatographic system with said mass spectrometer and with an ultraviolet detector.