What is claimed is:

1. A method for characterizing an antibody-drug conjugate, said method comprising:

contacting a sample including the antibody-drug conjugate to a chromatographic system having a size-exclusion chromatography resin;

washing said size-exclusion chromatography resin using a mobile phase to provide an eluent including the antibody-drug conjugate; and

characterizing the antibody-drug conjugate in said eluent using an electrospray ionization mass spectrometer under native conditions.

2. The method of claim 1, wherein the electrospray ionization mass spectrometer is coupled to the chromatographic system having the size-exclusion chromatography resin, or wherein the electrospray ionization mass spectrometer is coupled online to the chromatographic system having the size-exclusion 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 at least one three way-splitter is used to couple the electrospray ionization mass spectrometer to the chromatographic system having the size-exclusion chromatography resin.

5. The method of claim 1, wherein at least one three way-splitter is used to couple an ultraviolet detector to the chromatographic system having the size-exclusion chromatography resin.

6. The method of claim 5, wherein the eluent from washing the size-exclusion chromatography resin is introduced in the ultraviolet detector through the at least one three way-splitter at a flow rate of 0.2 mL/min to 0.4 mL/min.

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

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

9. The method of claim 1, wherein the mobile phase used to wash the size-exclusion chromatography resin has a total volatile salt concentration of 100 mM.

10. The method of claim 1, wherein the mobile phase used to wash the size-exclusion chromatography resin has a flow rate of 0.2 mL/min to 0.4 mL/min.

11. The method of claim 1, wherein the mobile phase used to wash the size-exclusion chromatography resin has a pH of about 6.8.

12. The method of claim 1, wherein an amount of the sample including the antibody-drug conjugate contacted to the chromatography system is 10 µg to 100 µg.

13. The method of claim 1, wherein the antibody-drug conjugate is an engineered cysteine-based antibody-drug conjugate.

14. The method of claim 1, wherein the antibody-drug conjugate is a non-specific cysteine-based antibody-drug conjugate.

15. The method of claim 1, wherein characterizing the antibody-drug conjugate comprises characterizing drug to antibody ratio.