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(54) Title: METHOD FOR VIRAL INACTIVATION

(57) Abstract: Embodiments of the present disclosure are directed to systems and methods for modulating pH in a mixture containing a polypeptide. The pH may be modulated for any suitable purpose, e.g., inactivating virus in the mixture. Methods may include eluting, from a chromatography column, a mixture (e.g., an eluate) having a pH greater than, e.g., 3.9 and less than, e.g., 8.5. Methods may further include one or more of measuring a protein concentration of the mixture and measuring a pH of the mixture. An amount of acid necessary to reduce the pH of the mixture to a target pH may then be calculated based on the protein concentration of the mixture, the pH of the mixture, or both. After an acid addition amount is calculated, a portion of acid may be added to the mixture, wherein the portion of acid is sufficient to achieve the target pH.



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