

Quiz 13

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You will be using anion exchange ion chromatography (DEAE; pKa ~10.5) to purify your protein. You will start with a mobile phase at pH 7.5.

1. What will be the overall charge of the stationary phase (resin) of your column?
2. What will be the overall charge of the proteins that are retained in the resin bed when initially applied to the column?
3. If you were purifying the sigma⁷⁰ factor (remember Exam 2) from *E. coli*, how would you decide what pH range to use for the mobile phase? What would be the lower pH limit? What would be the upper pH limit?

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