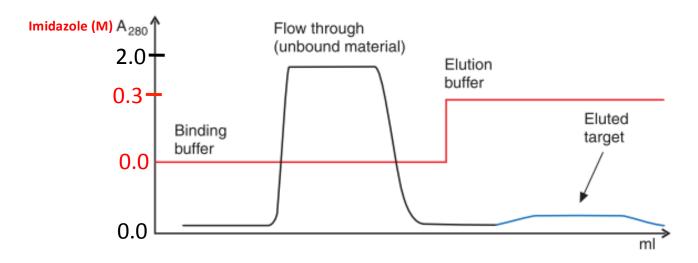
Exercise 3

Your protein is a 6xHis-tagged receptor that has been shown to be highly expressed in bacteria. Using a His-Trap column (Ni-NTA beads), you got the following chromatogram:



- 1. Explain the above chromatogram:
 - a. Would you expect such a chromatogram? Explain your answer.
 - b. What can lead to such a result? Give at least three reasons for the above result
- 2. A colleague of yours suggests that you try and purify your receptor through its natural ligand.
 - a. Do you think that following the colleague's suggestion will improve, not change or make the purification worse? What information will help you decide whether to pursue his suggestion or not?