

BMG 744

Helen Kim's lecture, Feb 2, 2010

Questions to have **good ideas** about the answers for class:

1. If proteins are “sieved” by both gel filtration and by SDS-gels, how are the two processes fundamentally different.
2. Quality control means different things in different approaches; what are some important quality control parameters in 2D gel analysis of proteins.
3. What is the concentration of urea in urine? What is the STRUCTURE of urea?
4. How are the two detergents in the two dimensions of 2D gels different, and how are they similar? Can you dilute from one to the other?
5. If you have seventeen “bands” in the second dimension arising from a single “band” from a first dimension blue-native gel, how could you confirm that all bands are part of the same complex.
6. What are the amino acids that cy-dyes bind to, versus Sypro Ruby, versus Coomassie Brilliant blue? Which is most sensitive?
7. If DIGE is more expensive, and limited to lysine-labelling, why would anyone want to use it?
8. If a protein is a dominant protein in your preparation, why wouldn't you necessarily want to deplete for it, to be able to load more on the 2D gel?