

13.5

## SDS-PAGE

1. Give two factors that influence migration distance in gel electrophoresis. (5 points)
  - protein molecular weight
  - size of pores in gel
2. What is the purpose of adding sodium dodecyl sulfate to the sample buffer? (2 points)

it makes the sample buffer's consistency gel-like
3. The upper gel is called the stacking buffer, which has a larger pore size relative to the lower gel, which is called the sample buffer. (3 points)
4. What is the substance that is actually polymerized to form the SDS-PAGE gels? Briefly describe the resulting polymer's structure. (5 points)

sodium dodecyl sulfate
5. What roles do the ammonium persulfate and the TEMED play in the polymerization reaction? (4 points)

They speed up the reaction  
what else?
6. What are the benefits and the downsides of the two main types of stains we use on SDS-PAGE gels? (6 points)
  - coomassie blue + silver stain
  - coomassie is easier while silver is harder but you can see less with coomassie. The stains don't always correctly highlight the proteins in the gel.  
meaning unclear.