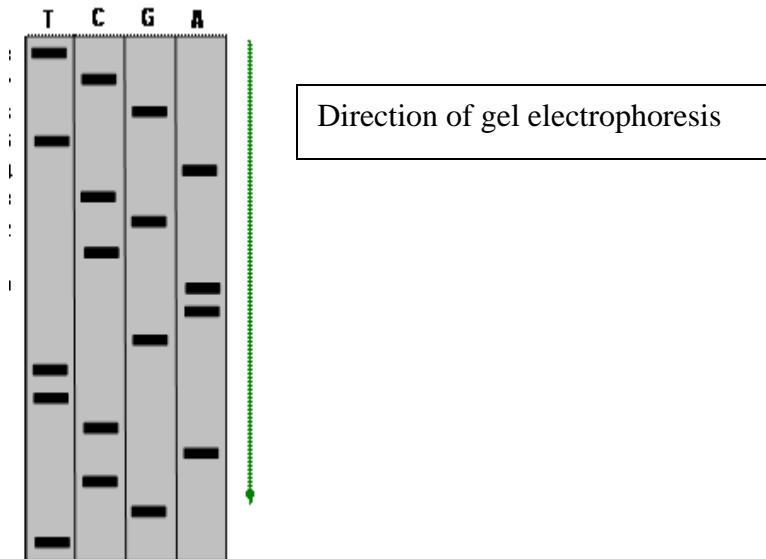


Quiz 2. More DNA and proteins

3. (Sequencing) Read sequence (the first 10 nucleotides) from the Sanger gel experiment results. Hint: from the shorter to the longer



4. (Protein encoding again) The protein products of what of the following pairs of mRNA sequences fold into the same tertiary structure:

- (1) CAUAAU, CAAAAG
- (2) UCUCGA, UCACGU
- (3) AAAGCU, CAAAAG
- (4) None of the above

| | | 2nd base in codon | | | | |
|-------------------|---|--------------------------|--------------------------|----------------------------|---------------------------|-------------------|
| | | U | C | A | G | |
| 1st base in codon | U | Phe Phe Leu Leu | Ser Ser Ser Ser | Tyr Tyr STOP STOP | Cys Cys STOP Trp | U C A G |
| | C | Leu Leu Leu Leu | Pro Pro Pro Pro | His His Gln Gln | Arg Arg Arg Arg | U C A G |
| | A | Ile Ile Ile Met | Thr Thr Thr Thr | Asn Asn Lys Lys | Ser Ser Arg Arg | U C A G |
| | G | Val Val Val Val | Ala Ala Ala Ala | Asp Asp Glu Glu | Gly Gly Gly Gly | U C A G |
| | | | | | | 3rd base in codon |