Eastern Mediterranean University Faculty of Arts and Sciences Molecular Biology and Genetics BIOL312 Practical 6

- 1. Search for the 'P06858' in SMART database.
 - a. What is (are) the domain name(s) and position(s) of this protein?
 - b. Give information about the PTM and Processing of this protein.
 - c. In which pathways does this entry plays role?
 - d. What are the predicted protein interactions? Name 5 of them.
- 2. You have been given the accession no NM_003183.6 .
 - a. List the name of protein domain(s) coded by this gene.
 - b. Delete the exon which starts from 456 to 586 nucleotides. Find out and write down the protein domain(s) coded by this shorter sequence. Prove your findings with related images.
 - c. When you delete exon positioned at 456 to 586, does this protein sequence remain in frame? Explain your answer.
 - d. Which software(s) did you use for your answers? Write down the name(s) and aim(s) for each software.
- 3. Search for `3AXK` protein at PDB database;
 - a. From which organism is this protein?
 - b. How many beta strands and alpha helixes are found in this protein?
 - c. How many subunits found in this protein?
 - d. Paste a print screen of the 3D structure of this protein whit space fill style, coloured subunits at black background.

Submission Deadline: 29.4.2020 @23.59