

Bio2250 - DNA Open Reading Frame Practice Problems

5' - T A T G G G A T T A T G A T C T C T A A A T G A A A G A T C A C C C C - 3'
3' - C T A C C C T A A T A C T A G A G A T T T A C T T T C T A G T G G G G - 5'

5' - T C A A T G A G G G T C A G G T G A T C A T G T G A C T C C T T C A A T A - 3'
3' - A G T T A C T C C C A G T C C A C T A G T A C A C T G A G G A A G T T A T - 5'

5' - T T G A C T T A G G T A A A A T A A C A A A T T A G T C A T T G G A A - 3'
3' - A A C T G A A T C C A T T T T A T T G T T T A A T C A T T A A C C T T - 5'

5'- g t t a a c t a a t c a g t c a g t t a a c t a - 3'
3'- c a a t t g a t t a g t c a g t c a a t t g a t - 5'

The above **DNA** sequences are from the middle of a eukaryotic protein-coding gene.

- Identify the single **Open Reading Frame** in each sequence.
- Give the polypeptide encoded by that reading frame;
label the **N** and **C** termini
- Is the above process 'Translation' ? Explain.