

Question 3

2 marks

A question with an image:

```
1  I C F * H N C V H * Q P Q T D T M V H L
1  H L L L T Q L C S L A T S N R H H G A S
1  T F A S D T T V F T S N L K Q T P W C I
1  ACATTTGCTTCTGACACAAGTGTGTTCACTAGCAACCTCAAACAGACACCATGGTGCATC
1      10      20      30      40      50
1  TGTAAACGAAGACTGTGTTGACACAAGTGATCGTTGGAGTTTGTCTGTGGTACCACGTAG
21  T P E E K S A V T A L W G K V N V D E V
21  D S * G E V C R Y C P V G Q G E R G * S
21  * L L R R S L P L L P C G A R * T W M K
61  TGAATCCTGAGGAGAAGTCTGCCGTTACTGCCCTGTGGGGCAAGGTGAACGTGGATGAAG
61      70      80      90      100     110
61  ACTGAGGACTCCTCTTCAGACGGCAATGACGGGACACCCCGTTCCACTTGCACCTACTTC
```

Figure 1: An image


Answer

Information for marking

```
Can have text in texinfo blocks
```

```
echo "Or code in bash blocks"
```

Assignment 1

**National Library of Medicine**
National Center for Biotechnology Information

Log in

< ORFfinder submitting page

> Help

Open Reading Frame Viewer

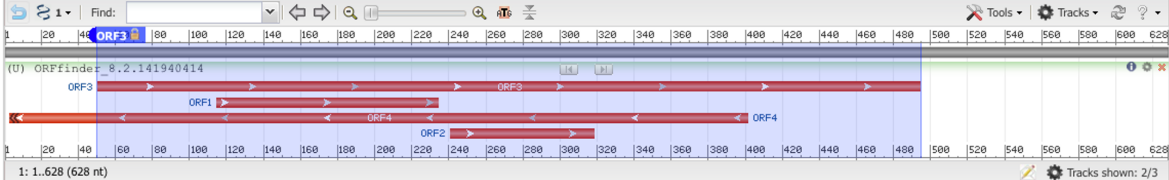
Sequence

ORFs found: 4 Genetic code: 1 Start codon: 'ATG' only

Find:

Tools

Tracks



1: 1..628 (628 nt)

Tracks shown: 2/3

ORF3 (147 aa) Display ORF as... Mark

```
>lcl|ORF3
MVHLTPEEKSAVTALMGKVNVDVCGEALGRLLVVPWTORFFESFGDLS
TPDAVMGNPKVKAHGKVLGAFSDGLAHLNLTGTFATLSELHCDKLPVD
PENFRLLGNVLVCVLAHHFGKEFTPPVQAAQYQKVAGVANALAHKYH
```

Marked set (0)

SmartBLAST

BLAST

BLAST Database:

UniProtKB/Swiss-Prot (swissprot)

Mark subset... Marked: 0 Download marked set as Protein FASTA

Label	Strand	Frame	Start	Stop	Length (nt aa)
ORF3	+	3	51	494	444 147
ORF4	-	3	401	>3	399 132
ORF1	+	1	115	234	120 39
ORF2	+	1	241	318	78 25

Six-frame translation...

Figure 2: An image