

Assignment 2 (14 marks total)

Download the data associated with this assignment using:

```
$ cd ~  
$ wget \  
[DATA_DOWNLOAD_LINK] \  
-O assignment_2.tar.gz  
$ tar xvf assignment_2.tar.gz
```

Question 1

10 marks

Question text goes here

Answer

Information for marking

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

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

Question 2

2 marks

Another question

Answer

Answer info

Assignment 2

Question 3

2 marks

A question with an image:

| Find genes by... | Search text |
|---|--|
| free text | human muscular dystrophy |
| chromosome and symbol | (ll[chr] OR 2[chr]).AND adh*[sym] |
| partial name and multiple species | alive[prop] AND transporter[title] AND ("Drosophila melanogaster"[orgn] OR "Mus musculus"[orgn]) |
| associated sequence accession | M11313[accn] |
| gene name (symbol) | BRCA1[sym] |
| publication (PubMed ID) | 11331580[PMID] |
| Gene Ontology (GO) terms or identifiers | "cell adhesion"[GO] 10030[GO] |
| genes with short variants of medical interest | "clinvar_gene_specific"[Filter] |
| chromosome and species | Y[CHR] AND human[ORGN] |
| Enzyme Commission (EC) numbers | 1.9.3.1[EC] |

Figure 1: An image

Answer

Information for marking

Can have text in texinfo blocks

Assignment 2

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

NCBI Resources How To Sign in to NCBI

Gene Gene ((Bos taurus[Organism]) AND 13[Chromosome]) AND 47039937:47060168[Base Position] Search

Create RSS Save search Advanced Help

Full Report Send to: Hide sidebar >>

Showing Current items.

PRNP prion protein [*Bos taurus* (cattle)] Download Datasets

Gene ID: 281427, updated on 12-Feb-2021

Summary

Official Symbol PRNP provided by [VGNC](#)

Official Full Name prion protein provided by [VGNC](#)

Primary source [VGNC:VGNC:33356](#)

See related [BGD:BT10271](#)

Gene type protein coding

RefSeq status VALIDATED

Organism [Bos taurus](#)

Lineage Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Laurasiatheria; Artiodactyla; Ruminantia; Pecora; Bovidae; Bovinae; Bos

Also known as PrP; prn; AltPrP

Orthologs [human](#) [mouse](#) [all](#)

NEW Try the new [Gene table](#)

Try the new [Transcript table](#)

Genomic context

Location: chromosome: 13 See PRNP in [Genome Data Viewer](#)

Exon count: 3

| Annotation release | Status | Assembly | Chr | Location |
|---------------------|-------------------|--|-----|----------------------------------|
| 106 | current | ARS-UCD1.2 (GCF_002263795.1) | 13 | NC_037340.1 (47039937..47060168) |
| 105 | previous assembly | Bos_taurus_UMD_3.1.1 (GCF_000003055.6) | 13 | AC_000170.1 (47400392..47418507) |

Chromosome 13 - NC_037340.1

[46527492] [47198189]

DIP2C LOC112449447 ZNF7011 PRNP PRND

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Figure 2: An image