

Assignment 2 (14 marks total)

Download the data associated with this assignment using:

```
$ cd ~  
$ wget \br/>"https://www.bing.com" \br/>-O assignment_2.tar.gz  
$ tar xvzf 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:

NCBI Resources How To Sign in to NCBI

Gene Gene Search Advanced Help

Gene

Gene integrates information from a wide range of species. A record may include nomenclature, Reference Sequences (RefSeqs), maps, pathways, variations, phenotypes, and links to genome-, phenotype-, and locus-specific resources worldwide.

Using Gene	Gene Tools	Other Resources
Gene Quick Start	Submit GeneRIFs	OMIM
FAQ	Submit Correction	RefSeq
Download/FTP	Statistics	RefSeqGene
RefSeq Mailing List	BLAST	Protein Clusters
Gene News	Genome Workbench	
Factsheet	Splign	

Representative queries

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 PRNP PRND

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 - Markers, Clone Names, Homology, Gene Ontology
- General protein information
- NCBI Reference Sequences (RefSeq)
- Related sequences
- Additional links

Genome Browsers

- Genome Data Viewer
- UCSC

Related information

- 3D structures
- BioProjects
- BioSystems
- Conserved Domains
- Full text in PMC
- Full text in PMC_nucleotide
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- Gene neighbors
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Figure 2: An image