

cd entrega2

cd Punto3

cd prokka_results

#para evol 1

#KAGFDIAF_00408

\$ grep "KAGFDIAF_00408" ecoli_ancestral.gff

NODE_12_length_31822_cov_4.522649 Prodigal:002006 CDS 3474 5066 . -
0

ID=KAGFDIAF_00408;Name=malT_2;db_xref=COG:COG2909;gene=malT_2;inference=ab initio prediction:Prodigal:002006,similar to AA

sequence:UniProtKB:P06993;locus_tag=KAGFDIAF_00408;product=HTH-type transcriptional regulator MalT

#KAGFDIAF_00530

\$ grep "KAGFDIAF_00530" ecoli_ancestral.gff

NODE_16_length_28105_cov_4.645312 Prodigal:002006 CDS 2208923570 .
+ 0

ID=KAGFDIAF_00530;Name=panF;db_xref=COG:COG4145;gene=panF;inference=ab initio prediction:Prodigal:002006,similar to AA

sequence:UniProtKB:P16256;locus_tag=KAGFDIAF_00530;product=Sodium/pantothenate symporter

#KAGFDIAF_00823

\$ grep "KAGFDIAF_00823" ecoli_ancestral.gff

NODE_27_length_24632_cov_4.384058 Prodigal:002006 CDS 1995121738 .
+ 0

ID=KAGFDIAF_00823;eC_number=4.1.1.18;Name=cadA_1;db_xref=COG:COG1982;gene=cadA_1;inference=ab initio prediction:Prodigal:002006,similar to AA

sequence:UniProtKB:P0A9H3;locus_tag=KAGFDIAF_00823;product=Inducible lysine decarboxylase

#KAGFDIAF_01225

\$ grep "KAGFDIAF_01225" ecoli_ancestral.gff

NODE_47_length_19935_cov_4.144920 Prodigal:002006 CDS 1509615995 .
+ 0
ID=KAGFDIAF_01225;eC_number=1.2.1.38;Name=argC;db_xref=COG:COG0002;gene=argC;inference=ab initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P11446;locus_tag=KAGFDIAF_01225;product=N-acetyl-
gamma-glutamyl-phosphate reductase

#KAGFDIAF_02081

\$ grep "KAGFDIAF_02081" ecoli_ancestral.gff

NODE_106_length_12735_cov_4.212618 Prodigal:002006 CDS 4981 5235 . +
0 ID=KAGFDIAF_02081;eC_number=2.1.-.-
;Name=mdoC_1;gene=mdoC_1;inference=ab initio
prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P75920;locus_tag=KAGFDIAF_02081;product=Glucans
biosynthesis protein C

#KAGFDIAF_02112

\$ grep "KAGFDIAF_02112" ecoli_ancestral.gff

NODE_108_length_12718_cov_4.092711 Prodigal:002006 CDS 1213312417 .
+ 0
ID=KAGFDIAF_02112;Name=yceD_1;db_xref=COG:COG1399;gene=yceD_1;inference
=ab initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P0AB28;locus_tag=KAGFDIAF_02112;product=Large ribosomal
RNA subunit accumulation protein YceD

#KAGFDIAF_02300

\$ grep "KAGFDIAF_02300" ecoli_ancestral.gff

NODE_124_length_11842_cov_4.158395 Prodigal:002006 CDS 9941 10852 . -
0
ID=KAGFDIAF_02300;eC_number=2.7.13.3;Name=dcuS_2;db_xref=COG:COG3290;gene=dcuS_2;inference=ab initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P0AEC8;locus_tag=KAGFDIAF_02300;product=Sensor histidine
kinase DcuS

#KAGFDIAF_02490

\$ grep "KAGFDIAF_02490" ecoli_ancestral.gff

NODE_142_length_10787_cov_4.290719 Prodigal:002006 CDS 4534 5766 . +
0

ID=KAGFDIAF_02490;Name=nadR;db_xref=COG:COG1056;gene=nadR;inference=ab
initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P27278;locus_tag=KAGFDIAF_02490;product=Trifunctional
NAD biosynthesis/regulator protein NadR

#KAGFDIAF_03785

\$ grep "KAGFDIAF_03785" ecoli_ancestral.gff

NODE_345_length_3705_cov_4.079178 Prodigal:002006 CDS 748 1926 . -
0

ID=KAGFDIAF_03785;eC_number=2.7.7.19;Name=pcnB;db_xref=COG:COG0617;gen
e=pcnB;inference=ab initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P0ABF1;locus_tag=KAGFDIAF_03785;product=Poly(A)
polymerase I

#KAGFDIAF_04009

\$ grep "KAGFDIAF_04009" ecoli_ancestral.gff

NODE_422_length_2271_cov_4.346119 Prodigal:002006 CDS 1315 1830 . +
0

ID=KAGFDIAF_04009;eC_number=2.1.1.63;Name=ogt;db_xref=COG:COG0350;gene
=ogt;inference=ab initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P0AFH0;locus_tag=KAGFDIAF_04009;product=Methylated-
DNA--protein-cysteine methyltransferase

#Evol 2

#KAGFDIAF_00010

\$ grep "KAGFDIAF_00010" ecoli_ancestral.gff

NODE_1_length_58499_cov_4.208781 Prodigal:002006 CDS 7428 8165 . +
0

ID=KAGFDIAF_00010;Name=ccmC;db_xref=COG:COG0755;gene=ccmC;inference=a
b initio prediction:Prodigal:002006,similar to AA
sequence:UniProtKB:P0ABM1;locus_tag=KAGFDIAF_00010;product=Heme exporter
protein C

#KAGFDIAF_00408

```
$ grep "KAGFDIAF_00408" ecoli_ancestral.gff
```

```
NODE_12_length_31822_cov_4.522649   Prodigal:002006 CDS   3474 5066   .   -  
0
```

```
ID=KAGFDIAF_00408;Name=malT_2;db_xref=COG:COG2909;gene=malT_2;inference  
=ab initio prediction:Prodigal:002006,similar to AA  
sequence:UniProtKB:P06993;locus_tag=KAGFDIAF_00408;product=HTH-type  
transcriptional regulator MalT
```

```
#KAGFDIAF_00530
```

```
$ grep "KAGFDIAF_00530" ecoli_ancestral.gff
```

```
NODE_16_length_28105_cov_4.645312   Prodigal:002006 CDS   2208923570   .  
+   0
```

```
ID=KAGFDIAF_00530;Name=panF;db_xref=COG:COG4145;gene=panF;inference=ab  
initio prediction:Prodigal:002006,similar to AA  
sequence:UniProtKB:P16256;locus_tag=KAGFDIAF_00530;product=Sodium/pantoth  
enate symporter
```

```
#KAGFDIAF_01225
```

```
$ grep "KAGFDIAF_01225" ecoli_ancestral.gff
```

```
NODE_47_length_19935_cov_4.144920   Prodigal:002006 CDS   1509615995   .  
+   0
```

```
ID=KAGFDIAF_01225;eC_number=1.2.1.38;Name=argC;db_xref=COG:COG0002;gen  
e=argC;inference=ab initio prediction:Prodigal:002006,similar to AA  
sequence:UniProtKB:P11446;locus_tag=KAGFDIAF_01225;product=N-acetyl-  
gamma-glutamyl-phosphate reductase
```

```
#KAGFDIAF_01551
```

```
$ grep "KAGFDIAF_01551" ecoli_ancestral.gff
```

```
NODE_66_length_16713_cov_4.246668   Prodigal:002006 CDS   1435416597   .   -  
0
```

```
ID=KAGFDIAF_01551;Name=fhuA;db_xref=COG:COG1629;gene=fhuA;inference=ab  
initio prediction:Prodigal:002006,similar to AA  
sequence:UniProtKB:P06971;locus_tag=KAGFDIAF_01551;product=Ferrichrome  
outer membrane transporter/phage receptor
```

```
#KAGFDIAF_01551
```

#KAGFDIAF_02112

\$ grep "KAGFDIAF_02112" ecoli_ancestral.gff

NODE_108_length_12718_cov_4.092711 Prodigal:002006 CDS 1213312417 .

+ 0

ID=KAGFDIAF_02112;Name=yceD_1;db_xref=COG:COG1399;gene=yceD_1;inference
=ab initio prediction:Prodigal:002006,similar to AA

sequence:UniProtKB:P0AB28;locus_tag=KAGFDIAF_02112;product=Large ribosomal
RNA subunit accumulation protein YceD