

# BV-BRC Test Report

## V2. Circular Genome Browser

<b>Item to test</b>	Circular Genome Browser
<b>URL</b>	[Insert URL linking to genome browser for test case]
<b>Prerequisites</b>	None
<b>Tester(s)</b>	Rebecca Wattam
<b>References</b>	<a href="https://www.bv-brc.org/docs/quick_references/organisms_genome/genome_browser.html">https://www.bv-brc.org/docs/quick_references/organisms_genome/genome_browser.html</a>
<b>Test date</b>	7-Feb -22 (original - passed), 10-May-2022 (follow-up - passed)
<b>Test Result</b>	<b>Passed</b>

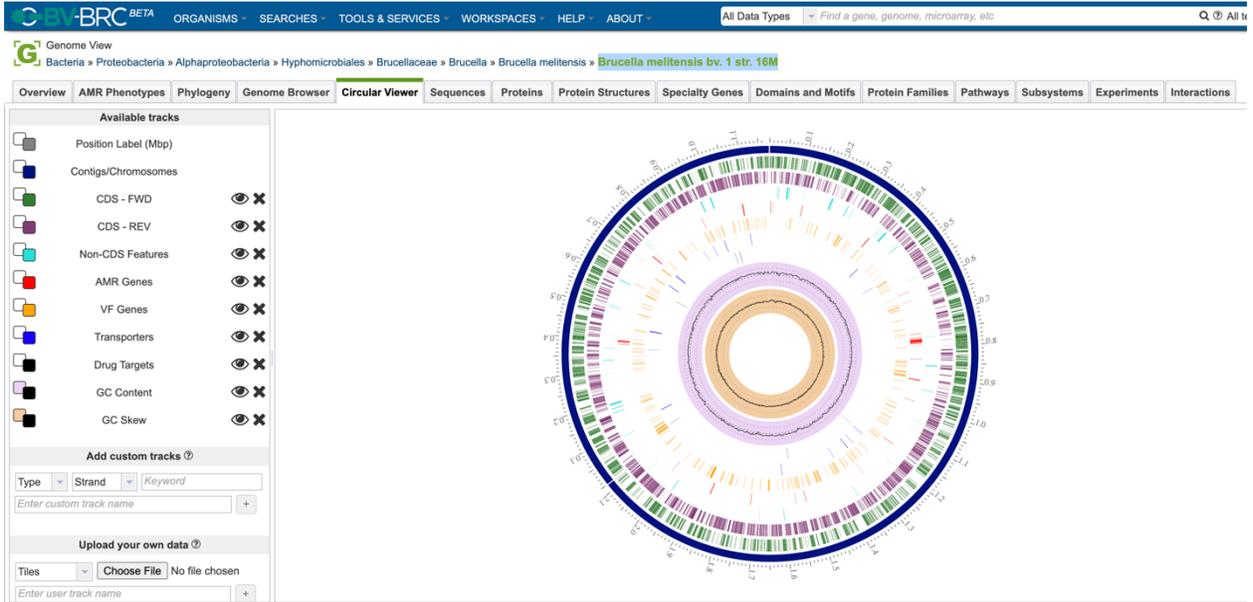
### Overview

- Test the circular Genome Browser using an example bacterial genome.
- Test genome display.
- Turn off tracks
- Change track colors
- Add custom track
- Upload your own data
- Test feature flyovers/links.
- Show track show/hide.

### Test Results

- Test results were verified by inspection.
- All visualization functions performed as expected.

Genome: [Brucella melitensis bv. 1 str. 16M/224914.11]



## Turn off tracks:

**EV-BRC** BETA ORGANISMS SEARCHES TOOLS & SERVICES WORKSPACES HELP ABOUT All Data Types Find a gene, genome, microarray, etc

Genome View  
Bacteria » Proteobacteria » Alphaproteobacteria » Hyphomicrobiales » Brucellaceae » Brucella » Brucella melitensis » **Brucella melitensis bv. 1 str. 16M**

Overview AMR Phenotypes Phylogeny Genome Browser **Circular Viewer** Sequences Proteins Protein Structures Specialty Genes Domains and Motifs Protein Families Pathways

**Available tracks**

<input type="checkbox"/>	Position Label (Mbp)	
<input type="checkbox"/>	Contigs/Chromosomes	
<input checked="" type="checkbox"/>	CDS - FWD	👁️ ✕
<input checked="" type="checkbox"/>	CDS - REV	👁️ ✕
<input checked="" type="checkbox"/>	Non-CDS Features	👁️ ✕
<input checked="" type="checkbox"/>	AMR Genes	👁️ ✕
<input checked="" type="checkbox"/>	VF Genes	👁️ ✕
<input checked="" type="checkbox"/>	Transporters	👁️ ✕

**Add custom tracks** ⓘ

Type  Strand  Keyword

+

**Upload your own data** ⓘ

Tiles   No file chosen

+

Change track color:

**EV-BRC**<sup>BETA</sup> ORGANISMS ▾ SEARCHES ▾ TOOLS & SERVICES ▾ WORKSPACES ▾ HELP ▾ ABOUT ▾ All Data Types ▾ Find a gene, genome, microarray, etc

Genome View  
Bacteria » Proteobacteria » Alphaproteobacteria » Hyphomicrobiales » Brucellaceae » Brucella » Brucella melitensis » **Brucella melitensis bv. 1 str. 16M**

Overview AMR Phenotypes Phylogeny Genome Browser **Circular Viewer** Sequences Proteins Protein Structures Specialty Genes Domains and Motifs Protein Families Pathways S

**Available tracks**

- Position Label (Mbp)
- Contigs/Chromosomes
- CDS - FWD
- CDS - REV
- Non-CDS Features
- AMR Genes
- VF Genes
- Transporters

**Add custom tracks** <sup>?</sup>

Type ▾ Strand ▾ Keyword

+

**Upload your own data** <sup>?</sup>

Tiles ▾  No file chosen

+

The circular genome viewer displays the genome of *Brucella melitensis* bv. 1 str. 16M. The outer ring is labeled with chromosome numbers from 1 to 21. The inner tracks show various genomic features: CDS - FWD (green), CDS - REV (purple), Non-CDS Features (cyan), AMR Genes (red), VF Genes (orange), and Transporters (blue). The tracks are arranged in a circular layout, with the outermost track being the Position Label (Mbp) and the innermost track being the Contigs/Chromosomes.

## Add custom track:

CBV-BRC BETA ORGANISMS SEARCHES TOOLS & SERVICES WORKSPACES HELP ABOUT All Data Types Find a gene, genome, microarray, etc

Genome View  
Bacteria » Proteobacteria » Alphaproteobacteria » Hyphomicrobiales » Brucellaceae » Brucella » Brucella melitensis » **Brucella melitensis bv. 1 str. 16M**

Overview AMR Phenotypes Phylogeny Genome Browser **Circular Viewer** Sequences Proteins Protein Structures Specialty Genes Domains and Motifs Protein Families Pathways Subsystems

**Available tracks**

- Position Label (Mbp)
- Contigs/Chromosomes
- CDS - FWD
- CDS - REV
- Non-CDS Features
- kinase

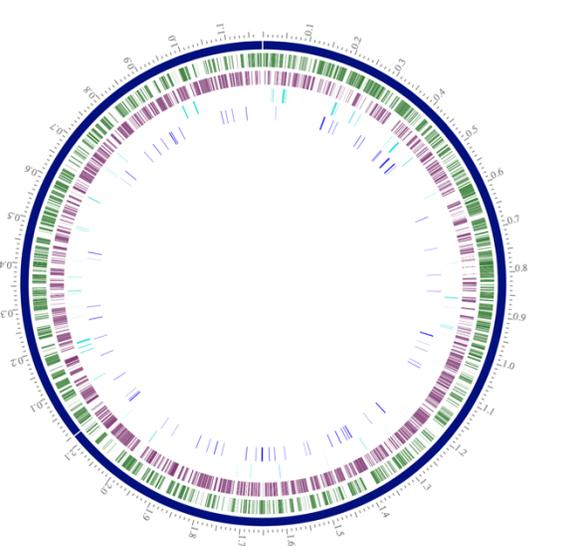
**Add custom tracks**

CDS both kinase  
Enter custom track name +

**Upload your own data**

Files Choose File No file chosen  
Enter user track name +

Export SVG Image



The circular genome viewer displays the genome of Brucella melitensis bv. 1 str. 16M. The outer ring shows the genome map with contigs labeled from 1.0 to 1.17. The inner tracks show CDS - FWD (green), CDS - REV (purple), Non-CDS Features (cyan), and a custom track for kinases (blue). The kinases track shows several blue bars of varying lengths and orientations around the genome.

## Upload your own data:

CBV-BRC BETA ORGANISMS SEARCHES TOOLS & SERVICES WORKSPACES HELP ABOUT All Data Types Find a gene, genome, microarray, etc

Genome View  
Bacteria » Proteobacteria » Alphaproteobacteria » Hyphomicrobiales » Brucellaceae » Brucella » Brucella melitensis » **Brucella melitensis bv. 1 str. 16M**

Overview AMR Phenotypes Phylogeny Genome Browser **Circular Viewer** Sequences Proteins Protein Structures Specialty Genes Domains and Motifs Protein Families Pathways Subsystem

**Available tracks**

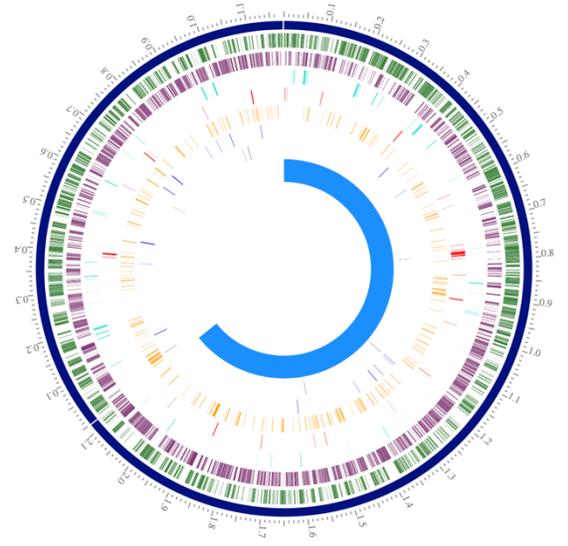
- Position Label (Mbp)
- Contigs/Chromosomes
- CDS - FWD
- CDS - REV
- Non-CDS Features
- AMR Genes
- VF Genes
- Transporters
- Drug Targets
- User track 1

**Add custom tracks**

Type Strand Keyword  
Enter custom track name +

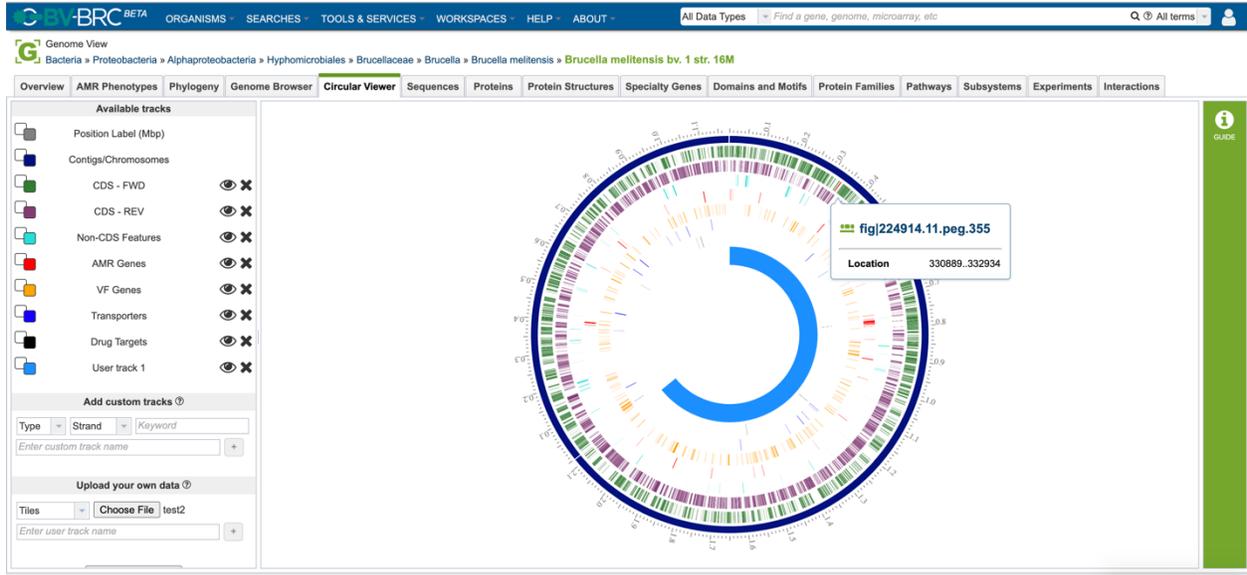
**Upload your own data**

Files Choose File test2  
Enter user track name +



The circular genome viewer displays the genome of Brucella melitensis bv. 1 str. 16M. The outer ring shows the genome map with contigs labeled from 1.0 to 1.17. The inner tracks show CDS - FWD (green), CDS - REV (purple), Non-CDS Features (cyan), AMR Genes (red), VF Genes (orange), Transporters (yellow), Drug Targets (black), and a custom user track (blue). The user track shows a large blue arc in the center of the genome, indicating a specific region of interest.

## Feature flyovers and links:



**Feature View**  
 Bacteria » Proteobacteria » Alphaproteobacteria » Hyphomicrobiales » Brucellaceae » Brucella » Brucella melitensis » Brucella melitensis bv. 1 str. 16M  
 fig|224914.11.pcg.452 | BMEI0405 | Oxidoreductase, short-chain dehydrogenase/reductase family

**Overview** | Genome Browser | Compare Region Viewer | Transcriptomics | Interactions | Domain and Motifs | Protein Structures

**fig|224914.11.pcg.452** | NC\_003317 | 418899 | 426758

Database Cross References	
RefSeq Locus Tag	BMEI0405
Protein ID	NP_539322.1
Gene ID	1196116

Functional Properties	
PATRIC Local Family	PLF_234_00000418
PATRIC Global Family	PGF_12808138
FIGfam	FIG01308941
Identical Proteins	<a href="#">View (new tab)</a>
Identical Genes	<a href="#">View (new tab)</a>
GO Terms	-
Subsystems	Putative oxidase COG2907 Oxidoreductase, short-chain dehydrogenase/reductase family

[Submit a request for structure determination to SSGCID](#)

Location	
Start	422128
End	422922
Strand	-
Location	complement(422128..422922)

Sequences	
NA Length	795
AA Length	264
NA Sequence	<a href="#">view</a>
AA Sequence	<a href="#">view</a>