BV-BRC Test Report

S3. Genomes Search

Item to test	Genomes Search
URL	https://www.bv-brc.org/searches/GenomeSearch
Prerequisites	None
References	https://www.bv-brc.org/docs/quick_references/searches_menu.html https://www.bv-brc.org/docs/quick_references/organisms_taxon/genome_table.html
Tester(s)	Christian Zmasek, Gene Tan, Rebecca Wattam, Ron Kenyon
Test date	22-Feb-2022 (original), 21-Apr-2022 (follow-up)
Test result	Passed

Overview

- Test the Genome Search using representative search criteria for bacterial and viral data.
- Test using example Keywords
- Test using combinations of Pathogen Group, Host Name, Host Group, Taxon Name, and Geographic Group.
- Inspect search results to verify that they match search criteria.
- For viral data, test using representative criteria and verify that returned genome counts are comparable with IRD/ViPR.

Test Results

- Test results were verified by examination of returned data via inspection, filters, and/or comparison with the same search in the legacy PATRIC and IRD/ViPR resources (if present in those resources).
- All searches returned expected data, with results matching search criteria.
- Search results were comparable between BV-BRC and ViPR for the advanced genome search (PATRIC does not have this specialized search tool).

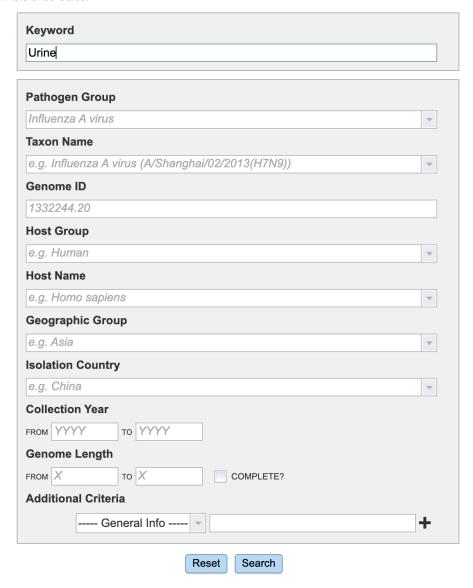
Keyword

Keyword: Urine

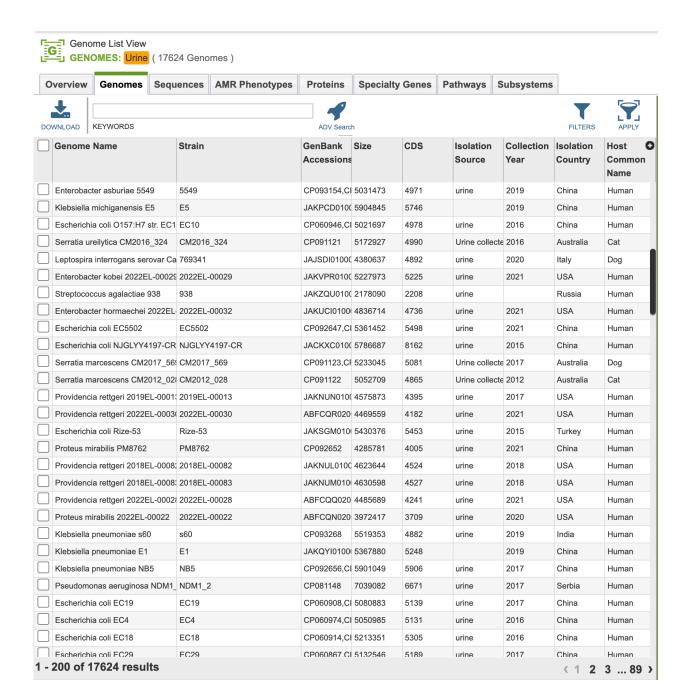
Advanced Search

Genome Search

Search for microbial or viral genomes (or genome segments for segmented viruses) of interest using generic keywords, genome id/name, pathogen group, various metadata attributes, or database identifiers. For further explanation, please see the Advanced Search Quick Reference Guide.



Results:

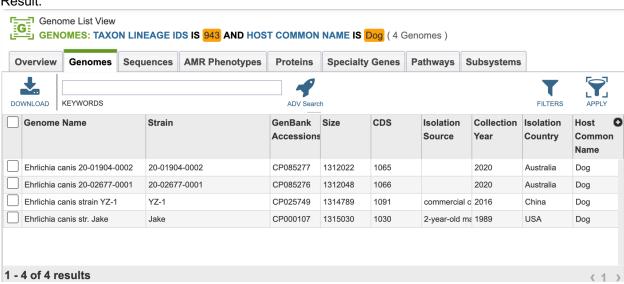


Other Search Parameters

Pathogen Group: Ehrlichia

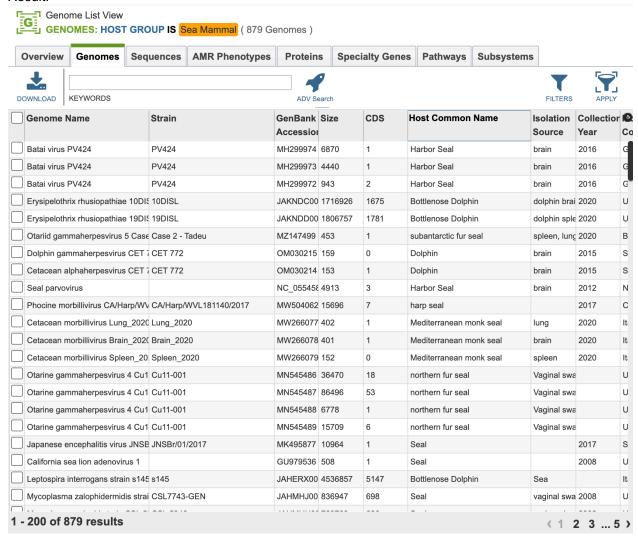
Host Name: Dog

Result:



Host Group: Sea Mammal

Result:



<u>Taxon Name</u>: Rotavirus <u>Host Group</u>: Human <u>Geographic Group</u>: Asia

Result:

verview	Genom	ies	Sequences	AMR Phenotypes		Proteins	Specialty Genes	Pathways	Subsystems		
DWNLOAD	KEYWORD	s				ADV Searc	h				FILTERS
Species		Strain		GenBank Accessions		Size	CDS	Collection Y	'ear Isolation Country	Host Com Name	
Rotavirus	Α	RVA/Human/CHN/HB-1/2019			MZ1653	370	1566	2	2019	China	Human
Rotavirus	Α	RVA/Human/CHN/HB-19/2019			MZ165372		1566	2	2019	China	Human
Rotavirus	Α	RVA/Human/CHN/HB-18/2019			MZ165371		1566	2	2019	China	Human
Rotavirus A		RVA/Human/CHN/HB-20/2019			MZ165373		1566	2	2019	China	Human
Rotavirus	Α	RVA/Human/CHN/HB-22/2019			MZ165374		1566	2	2019	China	Human
Rotavirus	Α	RVA/Human/CHN/HB-27/2019			MZ165375		1566	2	2019	China	Human
Rotavirus	Α	RVA/H	luman/CHN/HB-	43/2019	MZ1653	376	1566	2	2019	China	Human
Rotavirus	Α	RVA/Human/CHN/HB-28/2019		MZ165377		1566	2	2019	China	Human	
Rotavirus	A	RVA/Human/CHN/HB-45/2019		MZ1653	378	1566	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-33/2019		MZ1653	379	1566	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-109/2019		MZ1653	380	1566	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-1/2019		MZ1653	381	1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-22/2019		MZ1653	383	1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-18/2019		MZ1653	382	1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-28/2019		MZ165384		1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-45/2019		MZ165385		1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-19/2019		MZ165386		1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-20/2019		MZ165387		1059	2	2019	China	Human	
Rotavirus	Α	RVA/Human/CHN/HB-43/2019		MZ165389		1059	2	2019	China	Human	
Rotavirus	Rotavirus A RVA/Human/CHN/HB-27/2019		27/2019	MZ1653	388	1059	2	2019	China	Human	

Specialized search comparisons between BV-BRC and ViPR

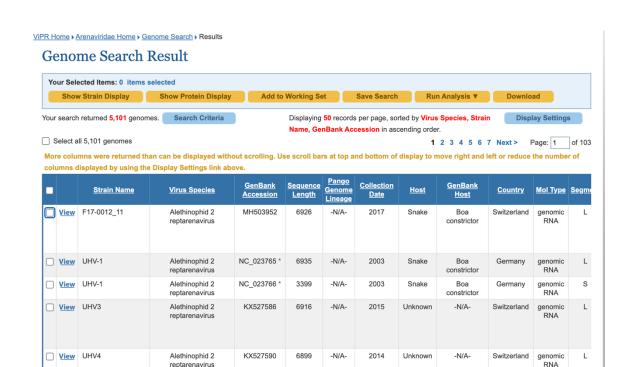
Verifying genome count for equivalent genome searches in BV-BRC and ViPR. differences are attributable to timing of data updates in each database.

Results:

Viral Group	Search Parameters	ViPR	BV-BRC
Herpesviridae	Taxon name: Dengue virus	62,923	62,572
	Isolation Country: Italy Host Group: Human	316	311
	Isolation Country: Iran Host Group: Human	460	460
	Collection Year: 2019	591	538
Dengue virus	Taxon Name: Dengue virus	38,487	37,967
Ebolavirus	Taxon Name: Ebolavirus	3,768	3,940
Enterovirus	Taxon Name: Enterovirus	108,463	105,065
HCV	Taxon name: Hepatitis C virus	223,012	Unable to test. Issue noted in GitHub
Lassa mammarenavirus	Taxon name: Lassa mammarenavirus	2,279	2,298
Zika virus	Taxon name: Zika virus	2,201	2,047
Rotavirus	Taxon name: Rotavirus	55,223	101,467
Influenza A virus	Taxon name: Influenza A virus	751,332	732,499
Arenaviridae	Taxon name: Arenaviridae	5,101	5,169

Arenaviridae (example screenshots)

ViPR:



BV-BRC:

