

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](#).

Keyword
<input type="text" value="Urine"/>
Pathogen Group
<input type="text" value="Influenza A virus"/>
Taxon Name
<input type="text" value="e.g. Influenza A virus (A/Shanghai/02/2013(H7N9))"/>
Genome ID
<input type="text" value="1332244.20"/>
Host Group
<input type="text" value="e.g. Human"/>
Host Name
<input type="text" value="e.g. Homo sapiens"/>
Geographic Group
<input type="text" value="e.g. Asia"/>
Isolation Country
<input type="text" value="e.g. China"/>
Collection Year
FROM <input type="text" value="YYYY"/> TO <input type="text" value="YYYY"/>
Genome Length
FROM <input type="text" value="X"/> TO <input type="text" value="X"/> <input type="checkbox"/> COMPLETE?
Additional Criteria
<input type="text" value="----- General Info -----"/> <input type="text" value=""/>

Reset

Search

Results:

Overview **Genomes** Sequences AMR Phenotypes Proteins Specialty Genes Pathways Subsystems

 **DOWNLOAD**

 **ADV Search**
 **FILTERS**
 **APPLY**

<input type="checkbox"/>	Genome Name	Strain	GenBank Accessions	Size	CDS	Isolation Source	Collection Year	Isolation Country	Host Common Name
<input type="checkbox"/>	Enterobacter asburiae 5549	5549	CP093154,CI	5031473	4971	urine	2019	China	Human
<input type="checkbox"/>	Klebsiella michiganensis E5	E5	JAKPCD0100	5904845	5746		2019	China	Human
<input type="checkbox"/>	Escherichia coli O157:H7 str. EC1	EC10	CP060946,CI	5021697	4978	urine	2016	China	Human
<input type="checkbox"/>	Serratia ureilytica CM2016_324	CM2016_324	CP091121	5172927	4990	Urine collecte	2016	Australia	Cat
<input type="checkbox"/>	Leptospira interrogans serovar Ca	769341	JAJSDI0100	4380637	4892	urine	2020	Italy	Dog
<input type="checkbox"/>	Enterobacter kobei 2022EL-00025	2022EL-00029	JAKVPR0100	5227973	5225	urine	2021	USA	Human
<input type="checkbox"/>	Streptococcus agalactiae 938	938	JAKZQU0100	2178090	2208	urine		Russia	Human
<input type="checkbox"/>	Enterobacter hormaechei 2022EL	2022EL-00032	JAKUCI0100	4836714	4736	urine	2021	USA	Human
<input type="checkbox"/>	Escherichia coli EC5502	EC5502	CP092647,CI	5361452	5498	urine	2021	China	Human
<input type="checkbox"/>	Escherichia coli NJGLYY4197-CR	NJGLYY4197-CR	JACKXC0100	5786687	8162	urine	2015	China	Human
<input type="checkbox"/>	Serratia marcescens CM2017_561	CM2017_569	CP091123,CI	5233045	5081	Urine collecte	2017	Australia	Dog
<input type="checkbox"/>	Serratia marcescens CM2012_021	CM2012_028	CP091122	5052709	4865	Urine collecte	2012	Australia	Cat
<input type="checkbox"/>	Providencia rettgeri 2019EL-00011	2019EL-00013	JAKNUN0100	4575873	4395	urine	2017	USA	Human
<input type="checkbox"/>	Providencia rettgeri 2022EL-00031	2022EL-00030	ABFCQR020	4469559	4182	urine	2021	USA	Human
<input type="checkbox"/>	Escherichia coli Rize-53	Rize-53	JAKSGM0100	5430376	5453	urine	2015	Turkey	Human
<input type="checkbox"/>	Proteus mirabilis PM8762	PM8762	CP092652	4285781	4005	urine	2021	China	Human
<input type="checkbox"/>	Providencia rettgeri 2018EL-00081	2018EL-00082	JAKNUL0100	4623644	4524	urine	2018	USA	Human
<input type="checkbox"/>	Providencia rettgeri 2018EL-00081	2018EL-00083	JAKNUM0100	4630598	4527	urine	2018	USA	Human
<input type="checkbox"/>	Providencia rettgeri 2022EL-00021	2022EL-00028	ABFCQQ020	4485689	4241	urine	2021	USA	Human
<input type="checkbox"/>	Proteus mirabilis 2022EL-00022	2022EL-00022	ABFCQN020	3972417	3709	urine	2020	USA	Human
<input type="checkbox"/>	Klebsiella pneumoniae s60	s60	CP093268	5519353	4882	urine	2019	India	Human
<input type="checkbox"/>	Klebsiella pneumoniae E1	E1	JAKQYI0100	5367880	5248		2019	China	Human
<input type="checkbox"/>	Klebsiella pneumoniae NB5	NB5	CP092656,CI	5901049	5906	urine	2017	China	Human
<input type="checkbox"/>	Pseudomonas aeruginosa NDM1_	NDM1_2	CP081148	7039082	6671	urine	2017	Serbia	Human
<input type="checkbox"/>	Escherichia coli EC19	EC19	CP060908,CI	5080883	5139	urine	2017	China	Human
<input type="checkbox"/>	Escherichia coli EC4	EC4	CP060974,CI	5050985	5131	urine	2016	China	Human
<input type="checkbox"/>	Escherichia coli EC18	EC18	CP060914,CI	5213351	5305	urine	2016	China	Human
<input type="checkbox"/>	Escherichia coli FC29	FC29	CP060867,CI	5132546	5189	urine	2017	China	Human

Other Search Parameters

Pathogen Group: Ehrlichia

Host Name: Dog

Result:

 Genome List View

GENOMES: TAXON LINEAGE IDS IS 943 AND HOST COMMON NAME IS Dog (4 Genomes)

Overview Genomes Sequences AMR Phenotypes Proteins Specialty Genes Pathways Subsystems

<input type="checkbox"/>	Genome Name	Strain	GenBank Accessions	Size	CDS	Isolation Source	Collection Year	Isolation Country	Host Common Name
<input type="checkbox"/>	Ehrlichia canis 20-01904-0002	20-01904-0002	CP085277	1312022	1065		2020	Australia	Dog
<input type="checkbox"/>	Ehrlichia canis 20-02677-0001	20-02677-0001	CP085276	1312048	1066		2020	Australia	Dog
<input type="checkbox"/>	Ehrlichia canis strain YZ-1	YZ-1	CP025749	1314789	1091	commercial c	2016	China	Dog
<input type="checkbox"/>	Ehrlichia canis str. Jake	Jake	CP000107	1315030	1030	2-year-old me	1989	USA	Dog

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Host Group: Sea Mammal

Result:

Genome List View
GENOMES: HOST GROUP IS Sea Mammal (879 Genomes)

- Overview
- Genomes**
- Sequences
- AMR Phenotypes
- Proteins
- Specialty Genes
- Pathways
- Subsystems








<input type="checkbox"/>	Genome Name	Strain	GenBank Accession	Size	CDS	Host Common Name	Isolation Source	Collection Year	Category
<input type="checkbox"/>	Batai virus PV424	PV424	MH299974	6870	1	Harbor Seal	brain	2016	C
<input type="checkbox"/>	Batai virus PV424	PV424	MH299973	4440	1	Harbor Seal	brain	2016	C
<input type="checkbox"/>	Batai virus PV424	PV424	MH299972	943	2	Harbor Seal	brain	2016	C
<input type="checkbox"/>	Erysipelothrix rhusiopathiae 10DISL	10DISL	JAKNDCC00	1716926	1675	Bottlenose Dolphin	dolphin brai	2020	U
<input type="checkbox"/>	Erysipelothrix rhusiopathiae 19DISL	19DISL	JAKND00	1806757	1781	Bottlenose Dolphin	dolphin sple	2020	U
<input type="checkbox"/>	Otariid gammaherpesvirus 5 Case 2 - Tadeu	Case 2 - Tadeu	MZ147499	453	1	subantarctic fur seal	spleen, lung	2020	B
<input type="checkbox"/>	Dolphin gammaherpesvirus CET 772	CET 772	OM030215	159	0	Dolphin	brain	2015	S
<input type="checkbox"/>	Cetacean alphaherpesvirus CET 772	CET 772	OM030214	153	1	Dolphin	brain	2015	S
<input type="checkbox"/>	Seal parvovirus		NC_055456	4913	3	Harbor Seal	brain	2012	N
<input type="checkbox"/>	Phocine morbillivirus CA/Harp/WVL181140/2017	CA/Harp/WVL181140/2017	MW504062	15696	7	harp seal		2017	C
<input type="checkbox"/>	Cetacean morbillivirus Lung_2020	Lung_2020	MW266077	402	1	Mediterranean monk seal	lung	2020	It
<input type="checkbox"/>	Cetacean morbillivirus Brain_2020	Brain_2020	MW266078	401	1	Mediterranean monk seal	brain	2020	It
<input type="checkbox"/>	Cetacean morbillivirus Spleen_2020	Spleen_2020	MW266079	152	0	Mediterranean monk seal	spleen	2020	It
<input type="checkbox"/>	Otarine gammaherpesvirus 4 Cu11-001	Cu11-001	MN545486	36470	18	northern fur seal	Vaginal swa		U
<input type="checkbox"/>	Otarine gammaherpesvirus 4 Cu11-001	Cu11-001	MN545487	86496	53	northern fur seal	Vaginal swa		U
<input type="checkbox"/>	Otarine gammaherpesvirus 4 Cu11-001	Cu11-001	MN545488	6778	1	northern fur seal	Vaginal swa		U
<input type="checkbox"/>	Otarine gammaherpesvirus 4 Cu11-001	Cu11-001	MN545489	15709	6	northern fur seal	Vaginal swa		U
<input type="checkbox"/>	Japanese encephalitis virus JNSE Br/01/2017	JNSE Br/01/2017	MK495877	10964	1	Seal		2017	S
<input type="checkbox"/>	California sea lion adenovirus 1		GU979536	508	1	Seal		2008	U
<input type="checkbox"/>	Leptospira interrogans strain s145	s145	JAHERX00	4536857	5147	Bottlenose Dolphin	Sea		It
<input type="checkbox"/>	Mycoplasma zalophidermidis strain CSL7743-GEN	CSL7743-GEN	JAHMHJ00	836947	698	Seal	vaginal swa	2008	U

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Taxon Name: Rotavirus
Host Group: Human
Geographic Group: Asia

Result:

Overview		Genomes	Sequences	AMR Phenotypes	Proteins	Specialty Genes	Pathways	Subsystems
 DOWNLOAD	<input type="text"/>	 ADV Search	<input type="text"/>	 FILTERS				
<input type="checkbox"/>	Species	Strain	GenBank Accessions	Size	CDS	Collection Year	Isolation Country	Host Common Name
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-1/2019	MZ165370	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-19/2019	MZ165372	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-18/2019	MZ165371	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-20/2019	MZ165373	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-22/2019	MZ165374	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-27/2019	MZ165375	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-43/2019	MZ165376	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-28/2019	MZ165377	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-45/2019	MZ165378	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-33/2019	MZ165379	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-109/2019	MZ165380	1566	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-1/2019	MZ165381	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-22/2019	MZ165383	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-18/2019	MZ165382	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-28/2019	MZ165384	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-45/2019	MZ165385	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-19/2019	MZ165386	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-20/2019	MZ165387	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-43/2019	MZ165389	1059	2	2019	China	Human
<input type="checkbox"/>	Rotavirus A	RVA/Human/CHN/HB-27/2019	MZ165388	1059	2	2019	China	Human

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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
<u>Lassa mammarenavirus</u>	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:

Genome Search Result

Your Selected Items: 0 items selected

[Show Strain Display](#)
[Show Protein Display](#)
[Add to Working Set](#)
[Save Search](#)
[Run Analysis ▾](#)
[Download](#)

Your search returned **5,101** genomes.

[Search Criteria](#)

Displaying **50** records per page, sorted by **Virus Species, Strain Name, GenBank Accession** in ascending order.

[Display Settings](#)

Select all 5,101 genomes

1 2 3 4 5 6 7 Next > Page: 1 of 103

More columns were returned than can be displayed without scrolling. Use scroll bars at top and bottom of display to move right and left or reduce the number of columns displayed by using the Display Settings link above.

<input type="checkbox"/>	View	Strain Name	Virus Species	GenBank Accession	Sequence Length	Pango Genome Lineage	Collection Date	Host	GenBank Host	Country	Mol Type	Segment
<input checked="" type="checkbox"/>	View	F17-0012_11	Alethinophid 2 reptarenavirus	MH503952	6926	-N/A-	2017	Snake	Boa constrictor	Switzerland	genomic RNA	L
<input type="checkbox"/>	View	UHV-1	Alethinophid 2 reptarenavirus	NC_023765 *	6935	-N/A-	2003	Snake	Boa constrictor	Germany	genomic RNA	L
<input type="checkbox"/>	View	UHV-1	Alethinophid 2 reptarenavirus	NC_023766 *	3399	-N/A-	2003	Snake	Boa constrictor	Germany	genomic RNA	S
<input type="checkbox"/>	View	UHV3	Alethinophid 2 reptarenavirus	KX527586	6916	-N/A-	2015	Unknown	-N/A-	Switzerland	genomic RNA	L
<input type="checkbox"/>	View	UHV4	Alethinophid 2 reptarenavirus	KX527590	6899	-N/A-	2014	Unknown	-N/A-	Switzerland	genomic RNA	L

BV-BRC:

Genome List View

GENOMES: TAXON LINEAGE IDS IS 11617 (5169 Genomes)

[Overview](#)
[Genomes](#)
[Sequences](#)
[AMR Phenotypes](#)
[Proteins](#)
[Specialty Genes](#)
[Pathways](#)
[Subsystems](#)

[DOWNLOAD](#)

KEYWORDS

[ADV Search](#)

[FILTERS](#)

[APPLY](#)

<input type="checkbox"/>	Genome Name	Family	Strain	GenBank Accessions	Size	CDS	Collection Year	Isolation Country	Host Common Name
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1057-MG	Arenaviridae	MOZ-1057-MGV	MZ512143	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1083-BG	Arenaviridae	MOZ-1083-BGC	MZ512142	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1089-BG	Arenaviridae	MOZ-1089-BGC	MZ512141	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1092-BG	Arenaviridae	MOZ-1092-BGC	MZ512140	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1125-MZ	Arenaviridae	MOZ-1125-MZC	MZ512139	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1136-MZ	Arenaviridae	MOZ-1136-MZC	MZ512138	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1154-MZ	Arenaviridae	MOZ-1154-MZC	MZ512137	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1155-MZ	Arenaviridae	MOZ-1155-MZC	MZ512136	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1157-MZ	Arenaviridae	MOZ-1157-MZC	MZ512135	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1179-BG	Arenaviridae	MOZ-1179-BGV	MZ512134	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1188-BG	Arenaviridae	MOZ-1188-BGV	MZ512133	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1190-BG	Arenaviridae	MOZ-1190-BGV	MZ512132	571	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1283-MZ	Arenaviridae	MOZ-1283-MZC	MZ512131	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-1334-MZ	Arenaviridae	MOZ-1334-MZV	MZ512130	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-306-CBC	Arenaviridae	MOZ-306-CBC	MZ512129	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-323-CBC	Arenaviridae	MOZ-323-CBC	MZ512128	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-326-CBC	Arenaviridae	MOZ-326-CBC	MZ512127	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-342-CBC	Arenaviridae	MOZ-342-CBC	MZ512126	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-345-CBC	Arenaviridae	MOZ-345-CBC	MZ512125	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-351-CBC	Arenaviridae	MOZ-351-CBC	MZ512124	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-365-CBC	Arenaviridae	MOZ-365-CBC	MZ512123	499	1	2019	Mozambique	Rat
<input type="checkbox"/>	Mopeia mammarenavirus MOZ-429-MZC	Arenaviridae	MOZ-429-MZC	MZ512122	499	1	2019	Mozambique	Rat

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< 1 2 3 ... 26 >