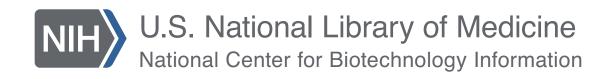# How To: Cite the Pathogen Detection Resource and the Data Contained Within

NCBI Pathogen Detection   https://www.ncbi.nlm.nih.gov/pathogens

NIH

U.S. National Library of Medicine
National Center for Biotechnology Information

At a glance

WARNING: Although the data in Pathogen Detection uses an accession.version system similar to other NCBI databases, due to the high turnover of analysis results, only a limited 'history' of these objects are kept.

- If citing the entire resource without using a subset of data, use the date the website was accessed
- If a subset of data is used, include the identifiers from the data archives (SRA, BioSample, GenBank/Assembly) as well as the Pathogen Detection specific identifiers (PDG, PDT, PDS)
- If a subset of data is used, acknowledge the original submitters in your presentation or manuscript
- If citing one of the methods used in Pathogen Detection, cite the appropriate published paper

Pathogen Detection BETA

ℹ To assist the National Database of Antibiotic Resistant Organisms (NDARO), NCBI Pathogen Detection identifies the antimicrobial resistance, stress response, and virulence genes found in bacterial genomic sequences. This enables scientists to track the spread of resistance genes and to understand the relationships between antimicrobial resistance and virulence.

NCBI Pathogen Detection integrates bacterial pathogen genomic sequences originating in food, environmental sources, and patients. It quickly clusters and identifies related sequences to uncover potential food contamination sources, helping public health scientists investigate foodborne disease outbreaks.

⚠ NCBI Pathogen Detection now contains over one million isolate genomes from 48 organism groups: 47 bacterial and one fungal!

Search isolates:

[   ] **Search**

Examples:

1. Search for isolates encoding a mobile colistin resistance gene and a KPC beta-lactamase
search: AMR_genotypes:mcr* AND AMR_genotypes:blaKPC*
2. Search for Salmonella isolates from the USA
search: geo_loc_name: USA AND taxgroup_name:"Salmonella enterica"

Explore the Data

Species   **New Isolates**   **Total Isolates**

Learn More

About

Success Stories

FAQ

Browser Factsheet

Antimicrobi...

Antimicrobi...

Contributors

Help

How To

Data Resources

Isolates Browser

Microbial Browser for Identification of Genetic and Genomic Elements (MicroBIGG-E)

Reference Gene Catalog

NEW Reference Gene Hierarchy

Reference HMM Catalog

Isolates with antibiotic resistant phenotypes

Download analysis results (FTP)

1. Note the date the website was accessed

2. If using the Isolates Browser proceed to the next page

3. If using the MicroBIGG-E proceed to page 7

4. If using NCBI AMR resources cite the appropriate publication

Help

Search

AMR_genotypes:mcr* AND AMR_genotypes:blaKPC*

Watched Isolates

Matched Clusters

#	Organism groups		SNP cluster			inical isolates		n-diff	Mi
1	Enterobacter		PDS000075025.1					0	
2	Aeromonas hydrophila		PDS000074337.2					1	
3	Enterobacter		PDS000008406.20		52	20		2	
4	E.coli and Shigella		PDS000098839.4		20	20		2	
5	E.coli and Shigella		PDS000098811.2		6	6		2	
6	Citrobacter freundii		PDS000074329.2		11	3		3	
7	Kluyvera_intermedia		PDS000010723.8		6	6		4	

5. If using a subset of data (search, filter, etc.) choose these columns

Choose columns

To arrange or move between lists use drag & drop.

Selected columns	Available columns
Isolate	Organism group
K-mer group	Virulence genotypes
SNP cluster	Strain
BioSample	Isolate identifiers
Assembly	Serovar
Run	Create date
SRA Center	Location
BioProject	Isolation source
	Isolation type

Clear   Default   OK   Cancel

Matched Isolates

|◄ ◄ Page 1 of 55 ► ►| ⟳ Records per Page 20 ▼   ▦ Choose columns   ⬇ Download   Hide plus AMR genotypes   ↗ Expand all   Cross-browser selection

#	Isolate	K-mer group	SNP cluster	BioSample	Assembly	Run	SRA Center	BioProject
1	PDT001306255.1	PDG000000004.3265		SAMEA12790346	GCA_023343515.1	ERR8288587	UNIVERSITY HOSPITAL JENA	PRJEB50554
2	PDT001292905.1	PDG000000039.442		SAMN27739162	GCA_023102135.1	SRR18889387	UPHL_ID	PRJNA288601
3	PDT001292680.1	PDG000000028.644		SAMN27549438	GCA_023061085.1			PRJNA677881
4	PDT001292671.1	PDG000000028.644	PDS000108549.1	SAMN17117768	GCA_023052915.1			PRJNA686409
5	PDT001292667.1	PDG000000028.644		SAMN21379552	GCA_023023265.1			PRJNA762162
6	PDT001288960.1	PDG000000012.1184	PDS000065417.5	SAMN20967329		SRR15695686	NATIONAL CENTRE FOR INFECTIOUS DISEASES	PRJNA757551
7	PDT001288946.1	PDG000000012.1184	PDS000065417.5	SAMN20967093		SRR15695491	NATIONAL CENTRE FOR INFECTIOUS DISEASES	PRJNA757551
8	PDT001288944.1	PDG000000012.1184	PDS000065417.5	SAMN20966881		SRR15695466	NATIONAL CENTRE FOR INFECTIOUS DISEASES	PRJNA757551
9	PDT001288926.1	PDG000000039.442		SAMN26796385	GCA_023033995.1	SRR18370239	UPHL_ID	PRJNA799063
10	PDT001288927.1	PDG000000039.442		SAMN26796384	GCA_023033935.1	SRR18370240	UPHL_ID	PRJNA799063
11	PDT001288921.1	PDG000000028.644		SAMN26796389		SRR18370234	UPHL_ID	PRJNA799063
12	PDT001288916.1	PDG000000028.644		SAMN26796394		SRR18370229	UPHL_ID	PRJNA799063
13	PDT001288909.1	PDG000000028.644	PDS000108202.1	SAMN26796401		SRR18370221	UPHL_ID	PRJNA799063
14	PDT001288898.1	PDG000000028.644	PDS000108214.1	SAMN26796411		SRR18370210	UPHL_ID	PRJNA799063
15	PDT001288900.1	PDG000000028.644	PDS000108214.1	SAMN26796409		SRR18370212	UPHL_ID	PRJNA799063

Search

AMR_genotypes:mcr* AND AMR_genotypes:blaKPC*   ✕ 🔍

Share | Save | Saved Searches | Watched Isolates

6. Then download the table and use it in the supplementary data for your paper

Matched Clusters

#	Organism groups	SNP cluster			...olates	Matched clinical isolates	Matched environmental isolates	Total isola...
1	Enterobacter	PDS000075025.1				1	10	11
2	Aeromonas hydrophila	PDS000074337.2						12
3	Enterobacter	PDS000008406.20						56
4	E.coli and Shigella	PDS000098839.4			20			120
5	E.coli and Shigella	PDS000098811.2			6			26
6	Citrobacter freundii	PDS000074329.2			11			14
7	Kluyvera_intermedia	PDS000010723.8			6			19

Download ✕

Data type: Table ▼

Type: Tab-delimited (.tsv) ▼

Name: isolates.tsv

1091 isolate record(s)

Download | Cancel

Matched Isolates

◀◀ ◀ Page 1 of 55 ▶ ▶▶ | 🔄 Records per Page 20 ▼ | ⬚ Choose columns | ⬇ Download | Hide plus AMR genotypes | ↗ Expand all | Cross-browser selection

#	Isolate	K-mer group	SNP cluster	BioSample	Assembly	Run	SRA Center	BioProject
1	PDT001306255.1	PDG000000004.3265		SAMEA12790346	GCA_023343515.1	ERR8288587	UNIVERSITY HOSPITAL JENA	PRJEB50554
2	PDT001292905.1	PDG000000039.442		SAMN27739162	GCA_023102135.1	SRR18889387	UPHL_ID	PRJNA288601
3	PDT001292680.1	PDG000000028.644		SAMN27549438	GCA_023061085.1			PRJNA677881
4	PDT001292671.1	PDG000000028.644	PDS000108549.1	SAMN17117768	GCA_023052915.1			PRJNA686409
5	PDT001292667.1	PDG000000028.644		SAMN21379552	GCA_023023265.1			PRJNA762162
6	PDT001288960.1	PDG000000012.1184	PDS000065417.5	SAMN20967329		SRR15695686	NATIONAL CENTRE FOR INFECTIOUS DISEASES	PRJNA757551
7	PDT001288946.1	PDG000000012.1184	PDS000065417.5	SAMN20967093		SRR15695491	NATIONAL CENTRE FOR INFECTIOUS DISEASES	PRJNA757551
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9	PDT001288926.1	PDG000000039.442		SAMN26796385	GCA_023033995.1	SRR18370239	UPHL_ID	PRJNA799063
10	PDT001288927.1	PDG000000039.442		SAMN26796384	GCA_023033935.1	SRR18370240	UPHL_ID	PRJNA799063
11	PDT001288921.1	PDG000000028.644		SAMN26796389		SRR18370234	UPHL_ID	PRJNA799063
12	PDT001288916.1	PDG000000028.644		SAMN26796394		SRR18370229	UPHL_ID	PRJNA799063
13	PDT001288909.1	PDG000000028.644	PDS000108202.1	SAMN26796401		SRR18370221	UPHL_ID	PRJNA799063
14	PDT001288898.1	PDG000000028.644	PDS000108214.1	SAMN26796411		SRR18370210	UPHL_ID	PRJNA799063
15	PDT001288900.1	PDG000000028.644	PDS000108214.1	SAMN26796409		SRR18370212	UPHL_ID	PRJNA799063

Search

The MicroBIGG-E table and the underlying sequence ... ested in the entire dataset. If you are interested, contact us at: _pd-h..._

						Cross-browser selection

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8. If using the MicroBIGG-E connect to the Isolate Browser using Cross-browser selection to obtain the submitted identifiers

#	Scientific name	Contig co...			e	Isolate	Contig	Start
1	Acinetobacter baumannii	204			22169482	PDT001147850.1	ABDEES010000070.1	133
2	Acinetobacter baumannii	204	2.615	EII3229423.1	SAMN22169482	PDT001147850.1	ABDEES010000070.1	949
3	Acinetobacter baumannii	138	1.769	EII3229432.1	SAMN22169482	PDT001147850.1	ABDEES010000071.1	1249
4	Acinetobacter baumannii	138	1.769	EII3229433.1	SAMN22169482	PDT001147850.1	ABDEES010000071.1	2052
5	Acinetobacter baumannii	138	1.769	EII3229438.1	SAMN22169482	PDT001147850.1	ABDEES010000071.1	6261
6	Acinetobacter baumannii	110	1.410	EII3229440.1	SAMN22169482	PDT001147850.1	ABDEES010000072.1	1018
7	Acinetobacter baumannii	110	1.410	EII3229441.1	SAMN22169482	PDT001147850.1	ABDEES010000072.1	1665
8	Acinetobacter baumannii	110	1.410	EII3229442.1	SAMN22169482	PDT001147850.1	ABDEES010000072.1	2355
9	Acinetobacter baumannii	110	1.410	EII3229443.1	SAMN22169482	PDT001147850.1	ABDEES010000072.1	3310
10	Acinetobacter baumannii	110	1.410	EII3229444.1	SAMN22169482	PDT001147850.1	ABDEES010000072.1	3651
11	Acinetobacter baumannii	90	1.154	EII3229446.1	SAMN22169482	PDT001147850.1	ABDEES010000073.1	73
12	Acinetobacter baumannii	67	0.859	EII3229448.1	SAMN22169482	PDT001147850.1	ABDEES010000074.1	106
13	Acinetobacter baumannii	92	1.136	EII3237056.1	SAMN22169481	PDT001147851.1	ABDEET010000001.1	29405
14	Acinetobacter baumannii	79	0.975	EII3237360.1	SAMN22169481	PDT001147851.1	ABDEET010000002.1	8
15	Acinetobacter baumannii	79	0.975	EII3237588.1	SAMN22169481	PDT001147851.1	ABDEET010000002.1	257982
16	Acinetobacter baumannii	56	0.691	EII3237867.1	SAMN22169481	PDT001147851.1	ABDEET010000003.1	218684
17	Acinetobacter baumannii	105	1.296	EII3239068.1	SAMN22169481	PDT001147851.1	ABDEET010000012.1	60332
18	Acinetobacter baumannii	105	1.296	EII3239069.1	SAMN22169481	PDT001147851.1	ABDEET010000012.1	61135
19	Acinetobacter baumannii	105	1.296	EII3239074.1	SAMN22169481	PDT001147851.1	ABDEET010000012.1	65344
20	Acinetobacter baumannii	105	1.296	EII3239093.1	SAMN22169481	PDT001147851.1	ABDEET010000012.1	86336

More information

For information on different accessions in Pathogen Detection see:

https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#unique-identifiers

For full details on data retention see:

https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#data-retention

For citing the Pathogen Detection site see:

https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#citing

For citing specific methods used in Pathogen Detection see:

https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#references-methods

Questions and further help: email pd-help@ncbi.nlm.nih.gov