

# How To: Find the latest Salmonella in the Isolates Browser

NCBI Pathogen Detection

<https://www.ncbi.nlm.nih.gov/pathogens>



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

# How do I find the latest Salmonella in the Isolates Browser?

- Method 1:
  - Select “New Isolates” for *Salmonella enterica* on the Pathogen Detection home page
  - Download table
- Method 2:
  - Use the “new:1” syntax in the [Isolates Browser](#) search window
  - Use filters or search to select Organism Group “Salmonella enterica ”
  - Download table

# 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.

**!** There has been a change to the *Isolation type / epi\_type* attribute that affects *min-same/min-diff* computation. Now where an isolate has no information to support the setting *environmental/other* the Browser will no longer default to that value but instead present as *NULL*. This means that the *min-same/min-diff* values for this isolate will present as *n/a*, and other *min-same/min-diff* values for isolates clustered with this isolate may change. Please see the [Help](#) text for more details.

Search isolates:

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
<a href="#">Salmonella enterica</a>	<a href="#">208</a>	<a href="#">392,329</a>
<a href="#">E.coli and Shigella</a>	<a href="#">224</a>	<a href="#">197,448</a>

1. Click "208" in the New Isolates column

## Learn More

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[FAQ](#)

[Browser Factsheet](#)

[Antimicrobial Resistance Factsheet](#)

[Antimicrobial Resistance](#)

[Contributors](#)

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## Data Resources

[Isolates Browser](#)

[Microbial Browser for Identification of Genetic and Genomic Elements \(MicroBIGG-E\)](#)

[Reference Gene Catalog](#)

**NEW** [Reference HMM Catalog](#)

[Isolates with antibiotic resistant phenotypes](#)

[Download analysis results \(FTP\)](#)

## Submit

[How to submit data](#)

[How to submit antibiotic resistance phenotypes](#)

[How to submit beta-lactamases](#)

[NCBI Submission Portal](#)

Search

taxgroup\_name:"Salmonella enterica" AND new:1



Share

Save

Se

Filters

Matched Clusters

#	Organism group	Matched isolates	Matched clinical isolates	Matched environmental isolates
1	Salmonella enterica	2	2	0
2	Salmonella enterica	1	1	0
3	Salmonella enterica <a href="#">PDS000046794.25</a>	126	126	0
4	Salmonella enterica <a href="#">PDS000001796.19</a>	1	0	1
5	Salmonella enterica <a href="#">PDS000012191.19</a>	12	0	12
6	Salmonella enterica <a href="#">PDS000001796.19</a>	1	1	0
7	Salmonella enterica <a href="#">PDS000046794.7</a>	24	24	0

2. Click Download

Matched Isolates

Page 1 of 11 | Records per Page 20 | Choose columns | Download | Show all AMR genotypes | Expand all | Cross-browser selection

#	Strain	AMRFind...	Source type	PD Ref Gen...	Organism Group	Isolation ...	Scientific name	AMR genotyp...	Stress genoty...	Virulence gen...	AMRFind...
1	1469894	3.10.11		2021-08-11.1	Salmonella ente...	clinical	Salmonella ente...	NONE	Complete (3) arsR golS golT	Complete (3) iroB iroC sinH	NUCLEOT
2	1469871	3.10.11		2021-08-11.1	Salmonella ente...	clinical	Salmonella ente...	Complete (4) blaCTX-M-15 catA1 dfrA7 Point (1) gyrA_S83F Show all 5 genes	Complete (5) merC merP merR Show all 5 genes	Complete (3) cdtB iroB iroC sinH Mistranslation (1)	NUCLEOT
3	1469891	3.10.16		2021-08-11.1	Salmonella ente...	clinical	Salmonella ente...	Complete (2) aph(3')-Ia tet(A)	Complete (5) golS golT merC	Complete (3) iroB iroC sinH	COMBINE

Search

taxgroup\_name:"Salmonella enterica" AND new:1



Share

Save

Save

Filters

Matched Clusters

#	Organism groups	SNP cluster	Matched isolates	Matched clinical isolates	Matched environmental isolates
1	Salmonella enterica	PDS000002867.662	2	2	0
2	Salmonella enterica	PDS000073471.62	1	1	0
3	Salmonella enterica	PDS000027384.25	126	126	0
4	Salmonella enterica	PDS000002469.10	1	0	1
5	Salmonella enterica	PDS000012191.14	12	0	12
6	Salmonella enterica	PDS000001796.19	1	1	0
7	Salmonella enterica		24	24	0

3. Click Download to get data in tab-delimited format

Matched Isolates

Page 1 of 1

Choose columns

Download

Show all AMR genotypes

Expand all

Cross-browser selection

#	Strain	AMR	Organism	Genotype	Stress genotype	Virulence genotype	AMRFinder
1	1469894	3.10.11	Salmonella enterica	2021-08-11.1	Complete (3) arsR golS golT	Complete (3) iroB iroC sinH	NUCLEOTIDE
2	1469871	3.10.11	Salmonella enterica	2021-08-11.1	Complete (4) merC merP merR	Complete (3) cdtB iroB iroC	NUCLEOTIDE
3	1469891	3.10.16	Salmonella enterica	2021-08-11.1	Complete (2) aph(3')-Ia tet(A)	Complete (5) golS golT merC	COMBINED

**Download**

Data type:

Type:

File name:

**208 isolate record(s)**

Download Cancel

# Pathogen Detection BETA



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## Learn More

[About](#)

[FAQ](#)

[Browser Factsheet](#)

[Antimicrobial Resistance Factsheet](#)

[Antimicrobial Resistance](#)

[Contributors](#)

[Help](#)

4. Click Isolate Browser

## Data Resources

[Isolates Browser](#)

[Microbial Browser for Identification of Genetic and Genomic Elements \(MicroBIGG-E\)](#)

[Reference Gene Catalog](#)

NEW [Reference HMM Catalog](#)



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<input type="checkbox"/>	AMRFinderPlus version
<input type="checkbox"/>	Source type
<input type="checkbox"/>	PD Ref Gene Catalog version
<input checked="" type="checkbox"/>	Organism Group
<input type="checkbox"/>	Isolation type
<input type="checkbox"/>	Scientific name
<input type="checkbox"/>	AMR genotypes core
<input type="checkbox"/>	Stress genotypes
<input type="checkbox"/>	Virulence genotypes
<input type="checkbox"/>	AMRFinderPlus analysis type
<input type="checkbox"/>	Host
<input type="checkbox"/>	SNP cluster
<input type="checkbox"/>	BioProject
<input type="checkbox"/>	Run
<input type="checkbox"/>	AST phenotypes

  

<input checked="" type="checkbox"/>	Salmonella enterica	208
<input type="checkbox"/>	Pseudomonas aeruginosa	51
<input type="checkbox"/>	Staphylococcus pseudintermedius	37
<input type="checkbox"/>	Clostridium perfringens	29
<input type="checkbox"/>	Listeria monocytogenes	18
<input type="checkbox"/>	Vibrio cholerae	16
<input type="checkbox"/>	Enterobacter	14
<input type="checkbox"/>	Clostridioides difficile	10
<input type="checkbox"/>	Citrobacter freundii	9
<input type="checkbox"/>	Campylobacter jejuni	7
<input type="checkbox"/>	Staphylococcus aureus	7
<input type="checkbox"/>	Klebsiella oxytoca	6
<input type="checkbox"/>	Vibrio vulnificus	6
<input type="checkbox"/>	Vibrio parahaemolyticus	4

Group

Total unique values: 26

**Matched Clusters**

#	Organism groups	Matched isolates	Matched clinical isolates	Matched environmental isolates
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2	Salmonella enterica	1	1	0
3	Salmonella enterica	126	126	0
4	Salmonella enterica <a href="#">PDS000046794.7</a>	1	0	1
5	Salmonella enterica <a href="#">PDS000012191.1</a>	12	0	12
6	Salmonella enterica <a href="#">PDS000001796.19</a>	1	1	0
7	Salmonella enterica <a href="#">PDS000046794.7</a>	24	24	0

10. Click Download

**Matched Isolates**

Page 1 of 11 | Records per Page 20 | Choose columns | Download | Show all AMR genotypes | Expand all | Cross-browser selection

#	Strain	AMRFind...	Source type	PD Ref Gen...	Organism Group	Isolation ...	Scientific name	AMR genotyp...	Stress genoty...	Virulence gen...	AMRFind...
1	1469894	3.10.11		2021-08-11.1	Salmonella ente...	clinical	Salmonella ente...	NONE	Complete (3) arsR golS	Complete (3) iroB iroC	NUCLEO...



11. Click Download to get data in tab-delimited format

The screenshot shows a web application interface with a list of organisms and a 'Download' dialog box. The list of organisms includes:

- Staphylococcus pseudintermedius (37)
- Clostridium perfringens (29)
- Listeria monocytogenes (18)
- Vibrio cholerae (16)
- Enterobacter (14)
- Clostridioides difficile (10)
- Citrobacter freundii (9)
- Campylobacter jejuni (7)
- Staphylococcus aureus (7)
- Klebsiella oxytoca (6)
- Vibrio vulnificus (6)
- Vibrio parahaemolyticus (4)

Total unique values: 26

The 'Download' dialog box is open, showing the following options:

- Data type: Table
- Type: Tab-delimited (.tsv)
- Name: isolates.tsv
- 208 isolate record(s)
- Buttons: Download, Cancel

The background shows a table with columns: SNP cluster, Matched isolates, Matched clinical isolates, Matched environmental isolates. The table contains 7 rows of data for Salmonella enterica.

SNP cluster	Matched isolates	Matched clinical isolates	Matched environmental isolates
1 Salmonella enterica PDS000002867.662	2	2	0
2 Salmonella enterica PDS000073471.62	1	1	0
3 Salmonella enterica PDS000027384.25	126	126	0
4 Salmonella enterica PDS000002469.10	1	0	1
5 Salmonella enterica PDS000012191.14	12	0	12
6 Salmonella enterica PDS000000796.19	1	0	0
7 Salmonella enterica PDS000000000.000	1	0	0

Matched Isolates

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#	Strain	AMRFind...	Source type	PD Ref Gen...	Organ...	Stress genoty...	Virulence gen...	AMRFind	
1	1469894	3.10.11		2021-08-11.1	Salmo...	Complete (3) arsR golS golT	Complete (3) iroB iroC sinH	NUCLEO...	
2	1469871	3.10.11		2021-08-11.1	Salmonella ente... clinical	Complete (4) blaCTX-M-15	Complete (5) merC	Complete (3) cdtB	NUCLEO...

# More information

- For full help documentation of the Reference Gene Catalog see:  
[https://www.ncbi.nlm.nih.gov/pathogens/pathogens\\_help/#reference-gene-catalog](https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#reference-gene-catalog)
- For details about filters see:  
[https://www.ncbi.nlm.nih.gov/pathogens/pathogens\\_help/#refgene-filters](https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#refgene-filters)
- For details about the table downloads see:  
[https://www.ncbi.nlm.nih.gov/pathogens/pathogens\\_help/#refgene-access-download](https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#refgene-access-download)

Questions and further help: email [pd-help@ncbi.nlm.nih.gov](mailto:pd-help@ncbi.nlm.nih.gov)