

How To: Find, using the MicroBIGG-E Map, blaKPC-containing *Klebsiella pneumoniae* isolates from China and the U.S. 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

At a glance

- Use the MicroBIGG-E Map
https://www.ncbi.nlm.nih.gov/pathogens/microbigge_map/
- Select "Klebsiella pneumoniae" from the Organism Group dropdown menu
- Select "Element symbol" in Filters and search for "*blaKPC*"
- Use the MicroBIGG-E International Map Panel to restrict data to isolates from China and the U.S.
- Use the Cross-Browser option to display selected isolates in the Isolates Browser

https://www.ncbi.nlm.nih.gov/pathogens/microbigg_map/

Health > Pathogen Detection > MicroBIGG-E > MicroBIGG-E International Map

Read this first!

Organism group:

2. Select Klebsiella pneumoniae as Organism group

4. Enter "blaKPC" in filter panel search bar

5. Select blaKPC in filter

3. Select Element symbol

Make selection to update the map View selected isolates in

Available filters 48

- Filter
- Class of antibiotic
- Collection date
- Create date
- Element symbol (gene name)
- Host
- Isolate
- Isolation source
- Isolation type
- Scientific name
- Subclass of antibiotic

Search

- blaKPC 17233
 - blaKPC-2 12375
 - blaKPC-3 4402
 - blaKPC 241
 - blaKPC-31 46
 - blaKPC-4 27
 - blaKPC-33 22
 - blaKPC-23 20
 - blaKPC-66 8
 - blaKPC-12 7
 - blaKPC-6 7
 - blaKPC-62 6

MicroBIGG-E International Map 1

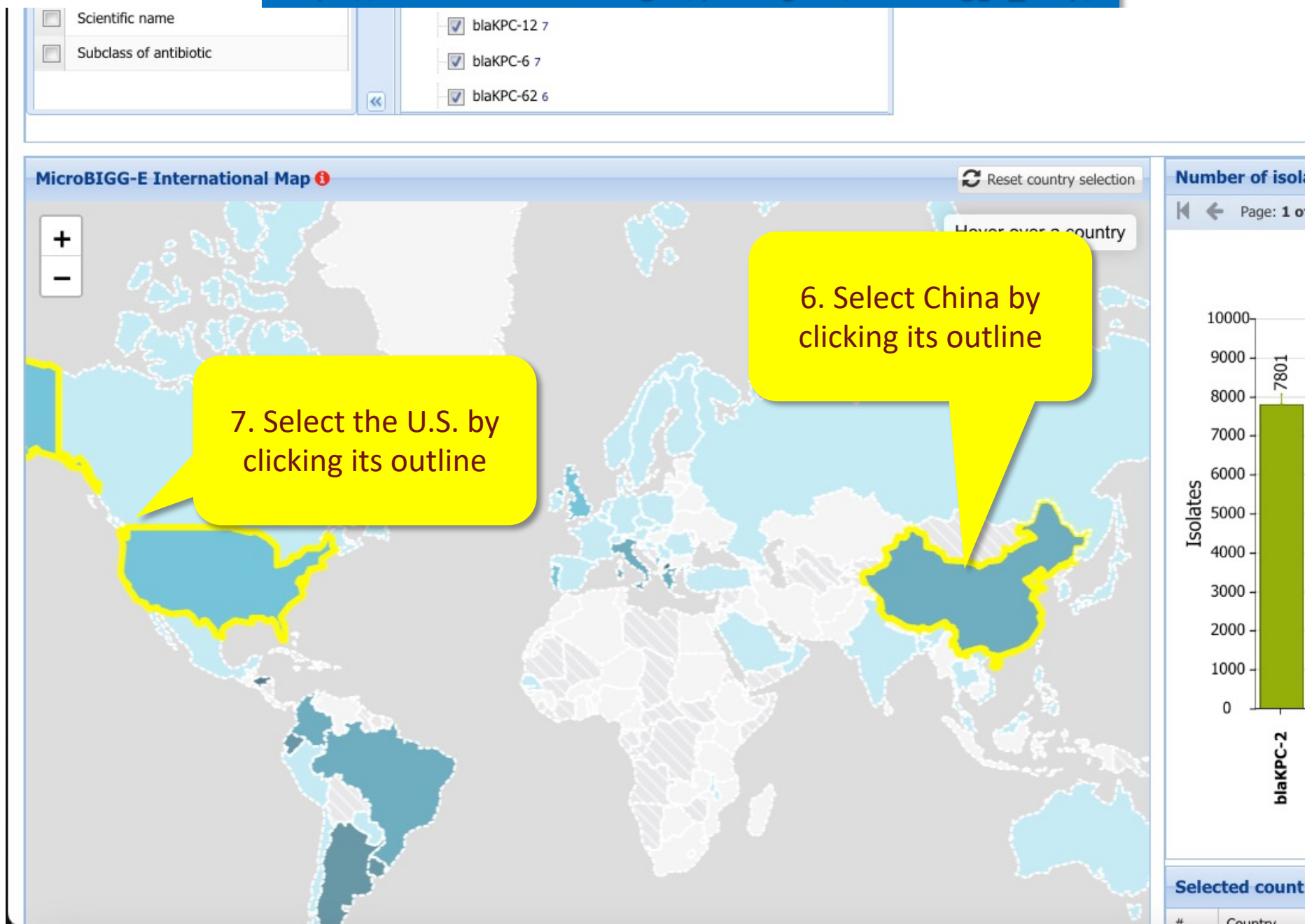
Number of isolates with a given element, colored by class/subclass

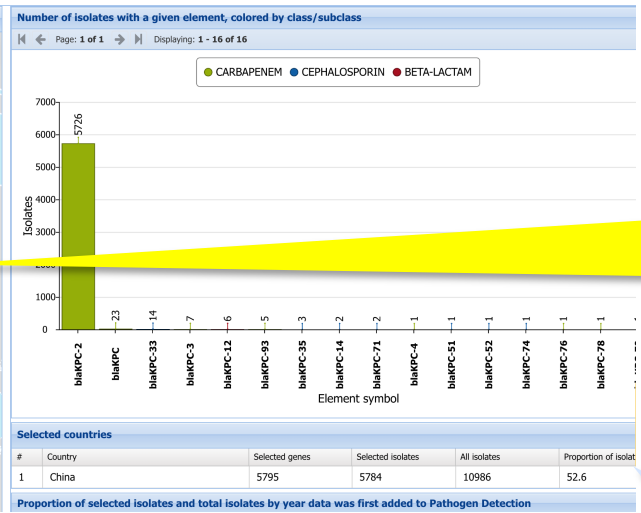
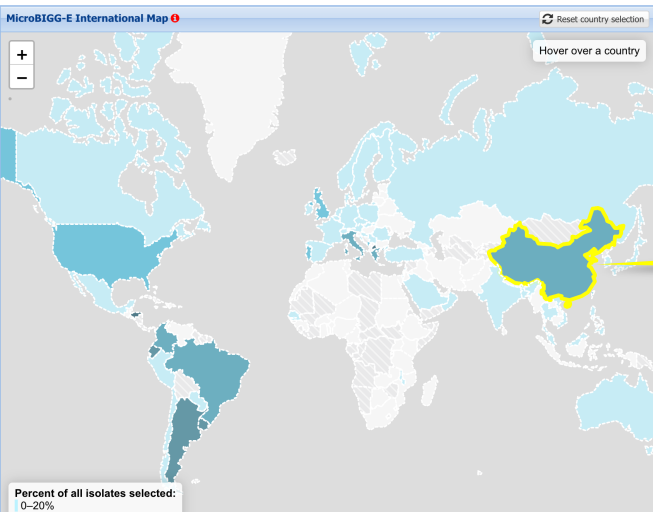
Page: 1 of 2 Displaying: 1 - 20 of 27

- CARBAPENEM
- CEPHALOSPORIN
- BETA-LACTAM

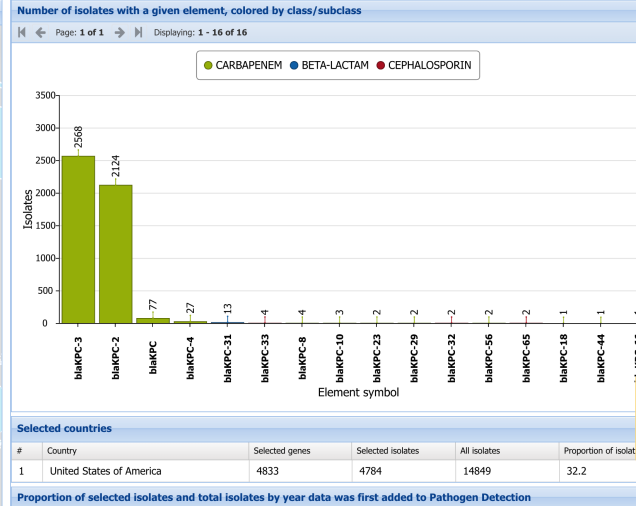
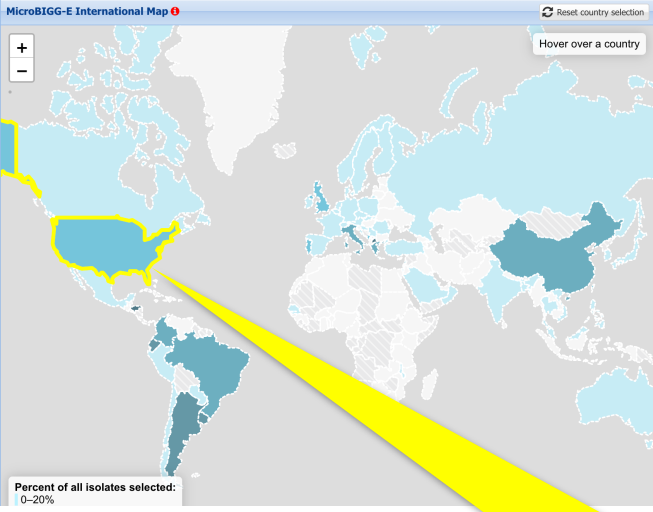
10000

https://www.ncbi.nlm.nih.gov/pathogens/microbigg_map/





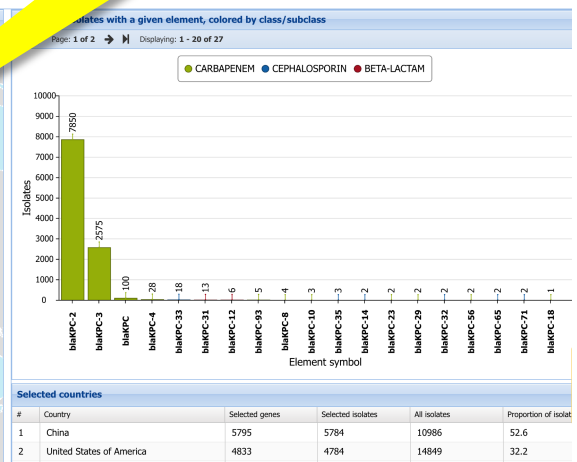
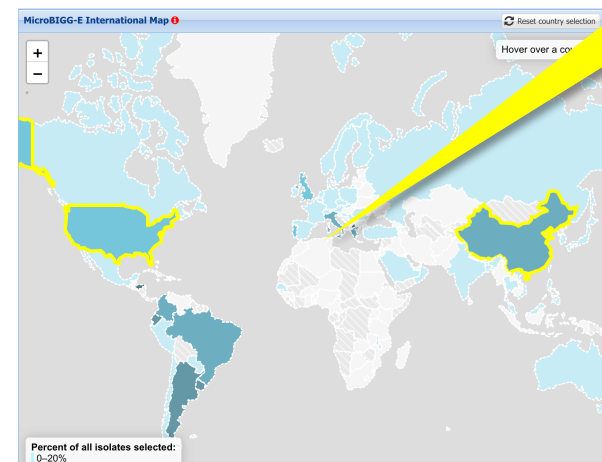
8. Select China to show the distribution of KPC alleles in isolates from China



Note the difference in KPC allele distributions between the two countries

9. Select the U.S. to show the distribution of KPC alleles in isolates from the U.S.

10. Select both China and the U.S. to show the distribution of KPC alleles in isolates from both countries combined



Read this first!

Organism group:

Make selection to update the map View selected isolates in

Filters 48

Available filters

Filter

- Class of antibiotic
- Collection date
- Create date
- Element symbol (gene name)
- Host
- Isolate
- Isolation source
- Isolation type
- Scientific name
- Subclass of antibiotic

Search

blaKPC 17233

- blaKPC-2 12375
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- blaKPC-4 27
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- blaKPC-12 7
- blaKPC-6 7
- blaKPC-62 6

11. Select the "Show in Isolates" button

MicroBIGG-E International Map

Number of isolates with a given element, colored by class/subclass

Page: 1 of 2 Displaying: 1 - 20 of 27

● CARBAPENEM ● CEPHALOSPORIN ● BETA-LACTAM

10000

Health > Pathogen Detection > Isolates Browser

Search

Share

Save

Saved Searches

Watched Isolates

Restricted by current cached isolate list. [Click here to reset.](#)

Filters

Matched Clusters

#	Organism groups	SNP cluster	Matched isolates	Matched clinical isolates	Matched environmental isolates	Total isolates
1	Klebsiella pneumoniae	PDS000045585.27	283	215	68	293
2	Klebsiella pneumoniae	PDS000045405.7	26	23	3	57
3	Klebsiella pneumoniae	PDS000045516.7	15	12	3	39
4	Klebsiella pneumoniae	PDS000075072.1	2	1	1	2
5	Klebsiella pneumoniae	PDS000075071.1	6	3	3	6
6	Klebsiella pneumoniae	PDS000020244.5	13	7	6	16
7	Klebsiella pneumoniae	PDS000074325.1	1	0	1	2

Matched Isolates

Page 1 of 240 | Records per Page 20 | Choose columns | Download | Expand all | Cross-browser selection

#	Organism group	Strain	AMRFinderPlus ...	AMRFind...	PD Ref Gen...	Virulence gen...	SRA Ce...	Specific name	Host	Collection...	AST phenotyp...	AMR genotyp...	AMR genotypes	Isolate identifiers	Con...	Serovar
1	Klebsiella pneu...	CRE513	NUCLEOTIDE	3.10.18	2021-09-30.1	Complete (2) ybtP ybtQ		Klebsiella pneu...	Homo sapie...	2017-05-02		Complete (8) aadA2 blaCTX-M-65 blaKPC-2 Partial (1) sul1 Point (5) gyrA_D87G gyrA_S83I ompK36_D135	Complete (9) aadA2 blaCTX-M-65 blaKPC-2 Partial (1) sul1 Point (5) gyrA_D87G gyrA_S83I ompK36_D135	CRE513 SRS6685659	100	

12. You can work with the data in the Isolates Browser, such as examining this large cluster composed of mostly KPC-containing isolates

More information

- For full help documentation of the MicroBIGG-E Map see: **LINK**
- For full help documentation of MicroBIGG-E see:
https://www.ncbi.nlm.nih.gov/pathogens/pathogens_help/#microbigge

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