**Klebsiella pneumoniae, Strain MRSN 4111**

**Catalog No. NR-55505**
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**For research use only. Not for use in humans.**

**Contributor:**
Multidrug-Resistant Organism Repository and Surveillance Network (MRSN), Bacterial Disease Branch, Walter Reed Army Institute of Research, Silver Spring, Maryland, USA

**Manufacturer:**
BEI Resources

**Product Description:**
Bacteria Classification: *Enterobacteriaceae, Klebsiella*
Species: *Klebsiella pneumoniae*
Strain: MRSN 4111

**Original Source:** *Klebsiella pneumoniae (K. pneumoniae)*, strain MRSN 4111 was isolated in 2011 from a human perianal sample in North America as part of a global surveillance program.  

**Comments:** *K. pneumoniae*, strain MRSN 4111 was deposited as part of the MRSN *Klebsiella pneumoniae* Diversity Panel available from BEI Resources as NR-55604. NR-55505 was deposited as multi-locus sequence type (MLST) ST 4833, K-locus type (KL) 31, O-locus type (OL) O5 and VIR score 0. MRSN 4111 was deposited as a susceptible strain, sensitive to amikacin, ampicillin/sulbactam, aztreonam, cefepime, cefazidime, ceftazidime/avibactam, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tetracycline, tigecycline, tobramycin and trimethoprim/sulfamethoxazole. Strain MRSN 4111 is reported to have one fosfomycin resistance gene (*fosA* ~gen; confering resistance to fosfomycin).* The complete genome of *K. pneumoniae*, strain MRSN 4111 has been sequenced (GenBank: [JAGYFB000000000](https://www.ncbi.nlm.nih.gov/nuccore/JAGYFB000000000)).

*K. pneumoniae* is a Gram-negative enterobacterium that is a major cause of nosocomial infections of the urinary and respiratory tracts. Due to the extensive spread of antibiotic-resistant strains, especially of extended-spectrum β-lactamase (ESBL)-producing strains, there has been renewed interest in *Klebsiella* infections.

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**
NR-55505 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**
- **Media:** Nutrient broth or Tryptic Soy broth or equivalent
- **Nutrient agar or Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or equivalent
- **Incubation:** Temperature: 37°C
- **Atmosphere:** Aerobic

**Propagation:**
1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 1 day.

**Citation:**
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Klebsiella pneumoniae*, Strain MRSN 4111, NR-55505. This strain is part of the *Klebsiella pneumoniae* Diversity Panel provided by the Multidrug-Resistant Organism Repository and Surveillance Network (MRSN) at the Walter Reed Army Institute of Research (WRAIR)."

**Biosafety Level:** 2

**Disclaimers:**
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References:

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