

**Clonal Distribution and Its Association With the Carbapenem Resistance Mechanisms
of Carbapenem-Non-Susceptible *Pseudomonas aeruginosa* Isolates From Korean
Hospitals**

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SUPPLEMENTAL DATA

Supplemental Data Table S1. Characteristics of 155 carbapenem-non-susceptible *P. aeruginosa* isolates collected in three Korean hospitals between 2011 and 2019 (provided in Excel format)

Supplemental Data Table S2. Primers used in this study

Primer	Sequence (5' to 3')		Use	Reference
GES-F	ATGCGCTTCATTACGCAC			
GES-R	CTATTGTCCGTGCTCAGG	<i>bla_{GES}</i>	Detection	[24]
KPC-F	ATGCCGTCTAGTTCTGCTG			
KPC-R	CGTTGACGCCAATCC	<i>bla_{KPC}</i>	Detection	[24]
blaIMP-F	GAATAGRRTGGCTTAAYTCTC			
blaIMP-R	CCAAACYACTASGTTATC	<i>bla_{IMP}</i>	Detection	[25]
blaNDM-F	TTGGCCTTGCTGTCCTTG			
blaNDM-R	ACACCAGTGACAATATCACCG	<i>bla_{NDM}</i>	Detection	[26]
blaSPM-F	CTGCTTGGATTCATGGCGC			
blaSPM-R	CCTTTCCGCGACCTTGATC	<i>bla_{SPM}</i>	Detection	[15]
blaVIM-F	GTTTGGTCGCATATCGCAAC			
blaVIM-R	AATGCGCAGCACCAGGATAG	<i>bla_{VIM}</i>	Detection	[15]
oxa-48-F	TTGGTGGCATCGATTATCGG			
oxa-48-R	GAGCACTTCTTTGTGATGGC	<i>bla_{oxa-48}</i>	Detection	[15]
oxa-58-F	CGATCAGAACATGTTCAAGCGC			
oxa58-R	ACGATTCTCCCCCTCTGCGC	<i>bla_{oxa-58}</i>	Detection	[15]
armA-F	ATTCTGCCTATCCTAATTGG			
armA-R	ACCTATACTTATCGTCGTC	<i>armA</i>	Detection	[27]
rmtB-F	GCTTCTGCGGGCGATGTAA			
rmtB-R	ATGCAATGCCCGCGCTCGTAT	<i>rmtB</i>	Detection	[27]
oprD-F	CCAAGAAACACTGCGTGCTA			
oprD-R	GGGGTGTTCGCGAGAGTAA	<i>oprD</i>	Amplification	[24]
oprD-seq-F	CCTGCGTAGGTGGCATAGAG			
oprD-seq-R	TCCAAGACCATGCTGAAGTG	<i>oprD</i>	Sequencing	[24]
blaIMP-Full-F	<u>GTTTTCCCAGTCACGACGTTATGAGC</u>	<i>bla_{IMP}</i>	Amplification	[28]

	AAGTTATCTGTATTCTT	and	
blaIMP-Full-R	<u>CAGGAAACAGCTATGACCATGATCGT</u>	sequencing	
	TTAACCCTTAACCGCCTG		
blaNDM-Full-F	<u>GTTTCCCAGTCACGACGTTATGGAA</u>	Amplification	
	TTGCCCAATATTATGCACCCGGTCG		
blaNDM-Full-R	<u>CAGGAAACAGCTATGACCATGATCAG</u>	<i>bla</i> _{NDM-1}	and [28]
	CGCAGCTTGTGCCATG		sequencing
blaVIM-Full-F	<u>GTTTCCCAGTCACGACGTTATGTT</u>	Amplification	
	AAACTTTGAGTAAG		
blaVIM-Full-R	<u>CAGGAAACAGCTATGACCATGACTAC</u>	<i>bla</i> _{VIM}	and [28, 29]
	TCAACGACTGAGCGAT		sequencing
ampC-F	GGGCTGGCCTCGAAAGAGGAC		Gene
ampC-R	GCACCGAGTCGGGAACTGCA	<i>ampC</i>	[30] expression
rpsL-F	GCTGCAAAACTGCCGCAACG		Gene
rpsL-R	ACCCGAGGTGTCCAGCGAAC	<i>rpsL</i>	[15] expression

Underlined sequences indicate regions of the universal primer that are not complementary to the template.