

Supplementary Table. Primer sequences, product length and annealing temperatures of ARGs categorised into five groups for multiplex PCR based on the annealing temperatures and cross-reactivity of primers

Group	Gene name	Primer sequence(5'-3')	Length(in bp)	Annealing temperature and duration	
GROUP-1	<i>bla</i> _{NDM}	F	TTGTCGAACCAGCTTGCC	261	59.8°C for 45s
		R	GGCGTAGTGCTCAGTGTC		
	<i>bla</i> _{CTX-M}	F	GAAACGTTCCGTCTCGACC	350	
		R	CGACGGCTTTCTGCCTTAG		
	<i>bla</i> _{KPC}	F	CTCATTCAAGGGCTTTCTTGCTG	436	
		R	CGTGTTCCCTTTAGCCAATCAAC		
	<i>bla</i> _{TEM}	F	TCGCCCTTATCCCTTTTTTGC	535	
		R	GTCCTGCAACTTTATCCGCC		
GROUP-2 (1)	<i>cat</i>	F	TCAYGGGCACTCATTYGATG	164	63°C for 45s
		R	AGAASGGGAARGATGATGCC		
	<i>aac</i>	F	CTCATATYGTGAGTGGTGG	456	
		R	GGCGTGTTTGAACCATGTAC		
GROUP-2 (2)	<i>sul2</i>	F	TCGCTCGACAGTTATCAACC	562	
		R	TTCTTGCGGTTTCTTTCAGC		
	<i>oqxA</i>	F	GTGGGATAGTTTTAACGGTCGCA	893	
		R	CGATGCGTAAACCGTCTGCCA		
GROUP-3	<i>bla</i> _{OXA}	F	GGAACAGCAATCATACACCAAAGAC	342	54.1°C for 45s
		R	CTGCACCAGTTTTCCCATACAG		
	<i>dfrA</i>	F	GTGCCAAAGGTGAACAGCTCC	261	
		R	AAACATCACCTTCCGGCTCGAT		
	<i>aadA</i>	F	CATTTGTACGGCTCCGCAG	468	
		R	CACTACATTTGCTCATCGCC		
	<i>sul1</i>	F	GACGGTGTTCCGGCATTCTG	535	
		R	CAAGAAAAATCCCATCCCCGG		
GROUP-4	<i>ermB</i>	F	TGAAAGCCGTGCGTCTGACAT	147	54°C for 45s
		R	GGATGAAAGCATTCCGCTGGC		
	<i>tet</i>	F	GTGAAGTGGTTCGGTTGGTTAG	426	
		R	GGCTATTCTCCTGCCACAAAG		
	<i>qnrS</i>	F	GGTATAGAGTCCGTGCGTG	330	
		R	TGATGTATCGACTTTGCGGG		
	<i>mphA</i>	F	GCAATGCTCAAGAATCGCCTGC	480	
		R	GATGGCAGGGTCATCAACGC		
GROUP-5	<i>bla</i> _{IMP}	F	GAAGGCGTTTATGTTCACTTCG	220	56°C for 45s
		R	CTATCCGCCCGTGCTG		
	<i>bla</i> _{SHV}	F	CAGCCGTTGAGCAAATTAAC	477	
		R	CATGCTGGCCGGGGTAG		
	<i>bla</i> _{VIM}	F	GGTCTCATTGTCCGTGATGG	537	
		R	GAGCAAGTCTAGACCGCCC		
	<i>bla</i> _{OXA-48}	F	CTTATCGGCTGTGTTTTTGGTG	760	
		R	GAGCACTTCTTTTGTGATGGC		