

Supplementary Materials

Table S1. Agar disc diffusion assay inhibition zone diameters
Means \pm standard deviations are given for 4 replicates.

β -Lactam	Zone Diameter (mm)					Empty pBCSK(+)
	pBCSK(+) <i>bla</i> _{IMP-1}	pBCSK(+) <i>bla</i> _{IMP-1-S115T}	pBCSK(+) <i>bla</i> _{IMP-1-S119G}	pBCSK(+) <i>bla</i> _{IMP-1-S115T-S119G}	No vector	
Ampicillin	0 \pm 0	0 \pm 0	0 \pm 0	0 \pm 0	25 \pm 1	30 \pm 1
Ceftazidime	0 \pm 0	0 \pm 0	0 \pm 0	0 \pm 0	38 \pm 1	43 \pm 3
Imipenem	25 \pm 1	25 \pm 1	25 \pm 1	24 \pm 1	33 \pm 2	38 \pm 2
Meropenem	24 \pm 1	25 \pm 1	24 \pm 1	23 \pm 1	39 \pm 1	45 \pm 3

Table S2. Enzyme kinetic constants
Means \pm standard deviations of three measurements are reported.

	IMP-1			IMP-1-S115T			IMP-1-S119G			IMP-1-S115T-S119G		
	k_{cat} (s^{-1})	K_m (μM)	k_{cat}/K_m ($\mu M^{-1}s^{-1}$)	k_{cat} (s^{-1})	K_m (μM)	k_{cat}/K_m ($\mu M^{-1}s^{-1}$)	k_{cat} (s^{-1})	K_m (μM)	k_{cat}/K_m ($\mu M^{-1}s^{-1}$)	k_{cat} (s^{-1})	K_m (μM)	k_{cat}/K_m ($\mu M^{-1}s^{-1}$)
PEN	2000 \pm 100	420 \pm 40	4.7 \pm 0.1	740 \pm 50	600 \pm 50	1.2 \pm 0.1	900 \pm 40	270 \pm 20	3.4 \pm 0.1	550 \pm 10	230 \pm 10	2.3 \pm 0.1
AMP	260 \pm 20	340 \pm 50	0.77 \pm 0.07	140 \pm 10	270 \pm 30	0.5 \pm 0.2	300 \pm 40	290 \pm 60	1.0 \pm 0.1	113 \pm 3	190 \pm 10	0.59 \pm 0.02
CEF	122 \pm 1	2.1 \pm 0.1	57 \pm 1	64 \pm 1	2.5 \pm 0.1	26 \pm 1	48 \pm 1	1.9 \pm 0.1	25 \pm 1	22 \pm 1	1.7 \pm 0.1	13 \pm 1
FOX	21 \pm 1	1.2 \pm 0.1	17 \pm 1	13 \pm 1	1.6 \pm 0.1	8.1 \pm 0.1	12 \pm 1	1.3 \pm 0.1	9.6 \pm 0.6	10 \pm 1	1.1 \pm 0.1	9.5 \pm 0.2
CTX	21 \pm 2	1.5 \pm 0.1	13 \pm 1	19 \pm 1	2.6 \pm 0.1	7.3 \pm 0.3	32 \pm 1	4.7 \pm 0.3	6.9 \pm 0.3	23 \pm 1	0.99 \pm 0.06	23 \pm 1
CAZ	18 \pm 1	50 \pm 6	0.35 \pm 0.02	14 \pm 1	43 \pm 2	0.32 \pm 0.01	15.4 \pm 0.2	35 \pm 1	0.45 \pm 0.01	25 \pm 2	51 \pm 6	0.50 \pm 0.03
IPM	200 \pm 10	33 \pm 1	6.1 \pm 0.1	153 \pm 3	29 \pm 1	5.2 \pm 0.1	180 \pm 3	12 \pm 1	15 \pm 1	110 \pm 13	28 \pm 5	4.0 \pm 0.3
MEM	26 \pm 1	7.5 \pm 0.6	3.6 \pm 0.2	14 \pm 1	5.8 \pm 0.6	2.3 \pm 0.1	54 \pm 1	10 \pm 1	5.4 \pm 0.1	22 \pm 1	3.0 \pm 0.2	7.5 \pm 0.4
DOR	180 \pm 20	12.8 \pm 0.6	14 \pm 1	113 \pm 7	18 \pm 2	6.3 \pm 0.3	350 \pm 20	29 \pm 1	12.1 \pm 0.4	250 \pm 40	29 \pm 8	9 \pm 1
ATM	ND			ND			ND			ND		