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Supporting information for article:

Structure of ADC-68, a novel carbapenem-hydrolyzing class C extended-spectrum β -lactamase isolated from *Acinetobacter baumannii*

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Table S1 Strains, plasmids, and primers used in this study.

Restriction sites appear in bold. The underlined bases indicate the hexahistidine tag site, and italic bases indicate the enterokinase recognition site. r: resistant.

Strains, plasmids, and primers	Phenotype, genotype and/or characteristics	Source (or reference)
Strains		
<i>Acinetobacter baumannii</i> D015	Strain with the gene <i>bla</i> _{ADC-68} in its chromosome	This study
<i>E. coli</i> TOP10	F ⁺ <i>mcrA</i> Δ(<i>mrr-hsdRMS-mcrBC</i>) φ80 <i>lacZΔM15</i> Δ <i>lacX74</i> <i>recA1</i> <i>araD139</i> Δ(<i>ara-leu</i>)7697 <i>galU</i> <i>galK</i> <i>rpsL</i> (Str ^R) <i>endA1</i> <i>nupG</i>	Invitrogen
<i>E. coli</i> BL21(DE3)	F ⁺ <i>ompT hsdS_B(r_B⁻m_B⁻) gal dcm</i> (DE3)	
<i>E. coli</i> ATCC25922	MIC reference strain	ATCC
Plasmids		
pET28a(+)	Expression vector, kanamycin ^r	Novagen
pHSG398	Expression vector, chloramphenicol ^r	TaKaRa
pET-28a(+)/ <i>His</i> ₆ - <i>bla</i> _{ADC-68}	pET28a(+) containing <i>bla</i> _{ADC-68} without signal peptide from <i>A. baumannii</i> D015	This study
pHSG398/ <i>bla</i> _{ADC-68}	pHSG398 containing <i>bla</i> _{ADC-68} from <i>A. baumannii</i> D015	This study
Primers		
ABAMPC-1	5'-ATGCGATTAAAAAAATTCTTGT-3'	Bou & Martinez-Beltran (2000)

ABAMPC-2	5'-TTATTTCTTATTGCATTCAAG-3'	Bou & Martinez-Beltran (2000)
<i>SacI</i> -ADC-68-F	5'-ATAGAGCTCAATGCGATTAAAAAAATTCTGTCTAC-3'	This study
<i>XbaI</i> -ADC-68-R	5'-GTGTCTAGATTATTCTTATTGCATTCAGCACAG-3'	This study
<i>NcoI</i> -EK-HIS-ADC-68-F	5'-ATACCAT <u>GGGCCATCATCATCATCATGACGACGACACAAGGG</u> CAATACACCAAAAGACCAAGA-3'	This study
<i>XhoI</i> -ADC-68-R	5'-CAGCTCGAGTTATTCTTATTGCATTCAAGCACAG-3'	This study
16S rRNA-F	5'-AGAGTTGATCHTGGTYAGA-3'	Yakupogullari <i>et al.</i> (2008)
16S rRNA-R	5'-ACGGYTACCTGTTACGACTT-3'	Yakupogullari <i>et al.</i> (2008)
Another AmpC-F	5'-GTGAAAATATTCGACCAATACCTGT-3'	This study
Another AmpC-R	5'-CTATACCAGATCGGTTCATGC-3'	This study

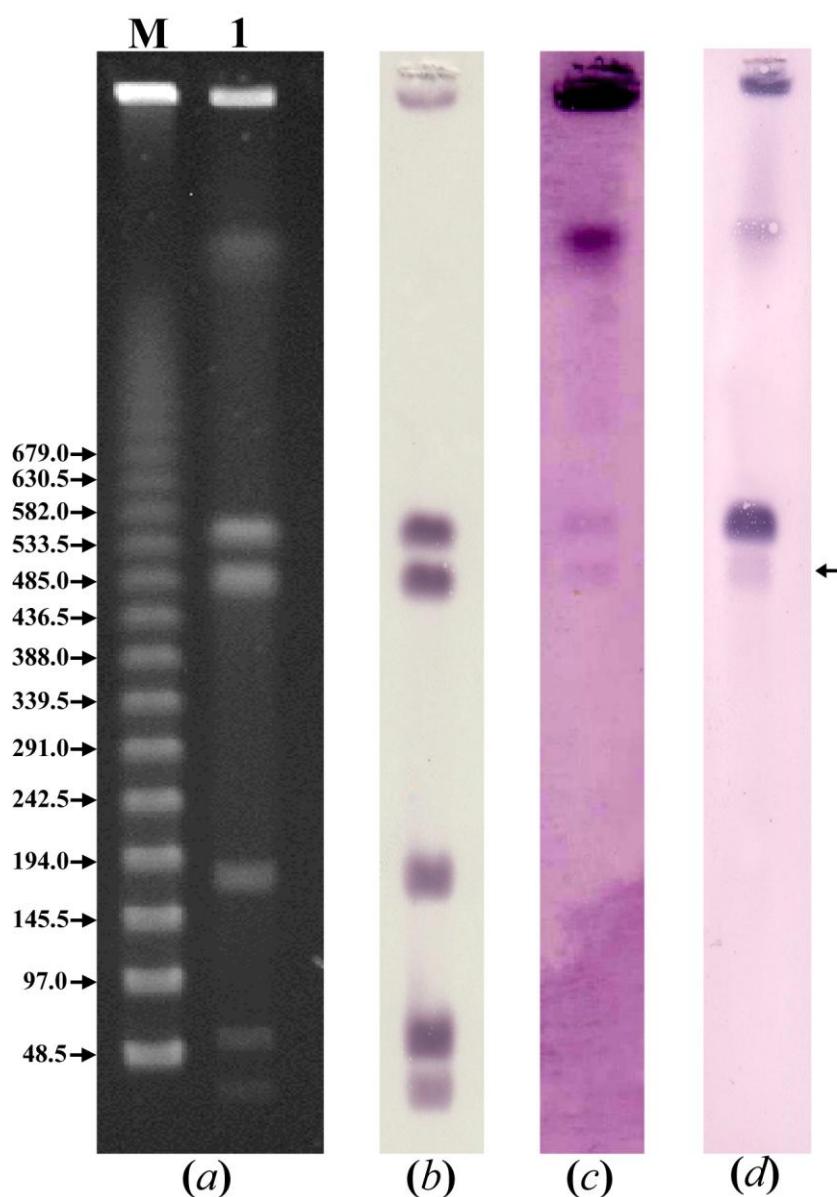


Figure S1 Localization of *bla_{ADC-68}* on I-CeuI-generated fragments of *Acinetobacter baumannii* D015. (a) I-CeuI fragment restriction pattern. (b) Hybridization with a probe that is specific for the 16S rRNA gene. (c) Hybridization with a probe that is specific for the *bla_{ADC-68}* gene. (d) Hybridization with a probe that is specific for another *bla_{AmpC}* gene (GenBank accession number KJ997965). Marker sizes (in kilobases) are indicated on the left. The *bla_{ADC-68}* gene is indicated with an arrow. Lane M, Lambda ladder PFGE marker (Bio-Rad, Hercules, CA, USA); lane 1: I-Ceu I fragment restriction pattern of total DNA from *A. baumannii* D015 carrying the *bla_{ADC-68}* gene.

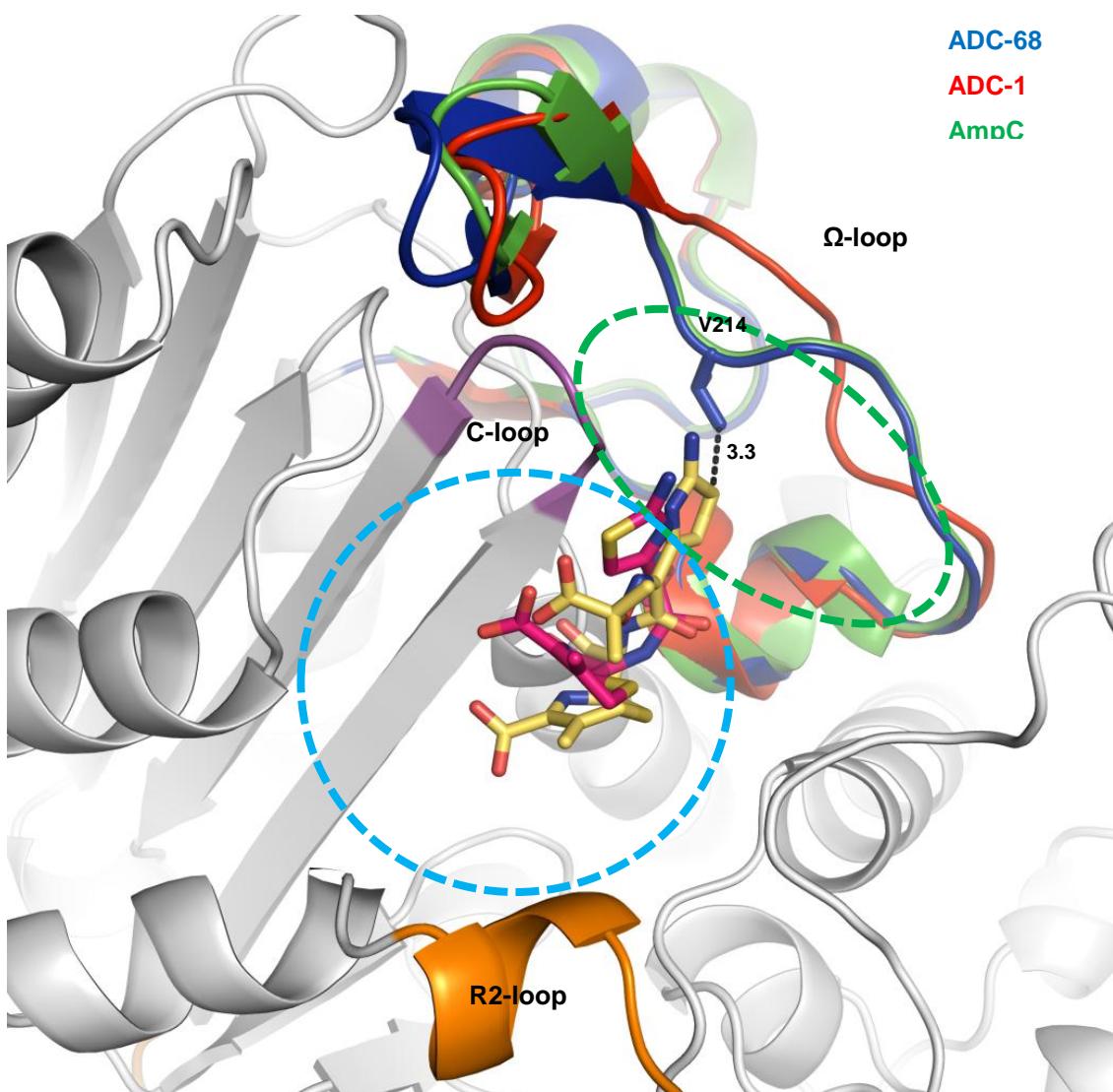


Figure S2 The superimposed complex of cefotaxime (PDB entry 3ixh) and ceftazidime (PDB entry 1iel) with ADC-68, ADC-1, and AmpC from *E. coli*. The Ω-loop of ADC-68, ADC-1, and AmpC are represented as blue, red, and green ribbon diagrams, respectively. Cefotaxime and ceftazidime are represented as hot pink and yellow sticks, respectively. The distances between residue V214 and R1 chains of ligands are shown by black-dashed lines (values are indicated in angstroms). R1 and R2 subsites are indicated as green- and cyan-dashed circles, respectively