CPO20240004 is an **NDM-1- and OXA-48-producing *Klebsiella pneumoniae*** strain from Denmark isolated in 2024

Sequence type:
ST395

Genotype:

Antimicrobial agent	Resistance gene/mutations
Carbapenems	*bla* $_{\text{NDM-1}}$, *bla* $_{\text{OXA-48}}$
Third generation cephalosporins	*bla* $_{\text{CTX-M-15,}}$ *bla* $_{\text{SHV-1}}$
Other beta-lactams	*bla* $_{\text{OXA-1}}$, *bla* $_{\text{TEM-1B}}$
Colistin	PmrB mutations; T157P, T246A and R256G
Fluoroquinolones	*oqxA, oqxB, qnrS1*
Aminoglycosides	*aac(6')-Ib-cr, aph(3')-VI, armA*
Tetracyclines	Not detected
Trimethoprim	*dfrA5*
Sulphonamide	*sul1, sul2*
Fosfomycin	*fosA*

Phenotype:

Antimicrobial agent	Reference MIC (mg/L)	Reference inhibition zone (mm)[1]	Interpretation[2]	WT/NWT[3]
Piperacillin-tazobactam	>64	6	R	NWT
Cefiderocol	ND	8-11	R	NWT
Cefotaxime	>8	6	R	NWT
Ceftazidime	>16	6	R	NWT
Ceftazidime-avibactam	>32	6	R	NWT
Ceftolozane-tazobactam	>16	6	R	NWT
Ertapenem	>4	6	R	NWT
Imipenem	>16	6-9	R	NWT
Imipenem-relebactam	>16	6-10	R	ECOFF NA
Meropenem	>16	6	R	NWT
Meropenem-vaborbactam	>16	6	R	ECOFF NA
Aztreonam	>16	6	R	NWT
Aztreonam-avibactam	0.25	27-30	S	WT
Ciprofloxacin	>4	6	R	NWT
Levofloxacin	>4	6	R	NWT
Amikacin	>64	6	R	NWT
Gentamicin	>16	6	R	NWT
Tobramycin	>16	6	R	NWT
Colistin	16-32	-	R	NWT
Trimethoprim-sulfamethoxazole	>16	6	R	NWT

ND: not determined; NA: not available.

[1]Using EUCAST disk diffusion methodology (https://www.eucast.org/ast_of_bacteria/disk_diffusion_methodology)

[2]SIR-categorization according to The European Committee on Antimicrobial Susceptibility Testing. Breakpoint tables for interpretation of MICs and zone diameters. Version 15.0, 2025. https://www.eucast.org.

[3]Categorization into wild type (WT) or non-wild type (NWT) according to available epidemiological cut-off values (ECOFF) available at https://mic.eucast.org/

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