CPO20240003 is an **OXA-232-producing *Escherichia coli*** strain from Denmark isolated in 2024

Sequence type:
ST5204 (Achtman)
ST698 (Pasteur)

Genotype:

Antimicrobial agent	Resistance gene/mutations
Carbapenems	*bla* $_{\text{OXA-232}}$
Third generation cephalosporins	*bla* $_{\text{CTX-M-15}}$
Other beta-lactams	*bla* $_{\text{TEM-1B}}$
Colistin	Not detected
Fluoroquinolones	*qnrS1*
Aminoglycosides	*aph(6)-Id, aph(3")-Ib*
Tetracyclines	*tet*(A)
Trimethoprim	*dfrA14*
Sulphonamide	*sul2*
Fosfomycin	Not detected

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	24-28	S	WT
Cefotaxime	>8	6	R	NWT
Ceftazidime	8-16	12-17	R	NWT
Ceftazidime-avibactam	≤0.25	25-28	S	WT
Ceftolozane-tazobactam	4-8	17-21	R	NWT
Ertapenem	1-2	17-19	R	NWT
Imipenem	1-2	22-24[4]	S	NWT
Imipenem-relebactam	≤0.5[5]	21-24[4]	S	NWT
Meropenem	0.5-1	23-25	S	NWT
Meropenem-vaborbactam	0.5	23-26	S	ECOFF NA
Aztreonam	>16	9-15	R	NWT
Aztreonam-avibactam	≤0.03	29-32	S	WT
Ciprofloxacin	0.25	22-25[4]	S	NWT
Levofloxacin	0.5	22-25[4]	S	NWT
Amikacin	2	19-24	S	WT
Gentamicin	0.5-1	19-25	S	WT
Tobramycin	0.5-1	18-24	S	WT
Tigecycline	0.125-0.25	21-24	S	WT
Colistin	0.25-0.5	-	S	WT
Trimethoprim-sulfamethoxazole	>16	6	R	NWT
Fosfomycin	0.5	24-29	S	WT

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/

[4]Inhibition zones are close to the breakpoint, increasing the risk of erroneous SIR categorisation.

[5]Although relebactam primarily inhibits class A and C beta-lactamases, the compound has a weak in vitro inhibitory effect also on OXA-48* carbapenemases in Enterobacterales, and MICs for imipenem-relebactam may be 1-3 dilutions lower than for imipenem alone, especially if imipenem MICs are only moderately raised.

Report created: **2025-Sep-29**