

CPO20240001 is an OXA-244-producing *Escherichia coli* strain from Denmark isolated in 2024

Sequence type:
ST1722 (Achtman)
ST1088 (Pasteur)

Genotype:

Antimicrobial agent	Resistance gene/mutations
Carbapenems	<i>bla</i> _{OXA-244}
Third generation cephalosporins	<i>bla</i> _{CTX-M-15} , <i>bla</i> _{oxa-1}
Other beta-lactams	<i>bla</i> _{TEM-1B}
Colistin	Not detected
Fluoroquinolones	Not detected
Aminoglycosides	Not detected
Tetracyclines	Not detected
Trimethoprim	Not detected
Sulphonamide	Not detected
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	26-30	S	WT
Cefotaxime	>8	6	R	NWT
Ceftazidime	16	8-14	R	NWT
Ceftazidime-avibactam	≤0.25	24-28	S	WT
Ceftolozane-tazobactam	8-16	14-19	R	NWT
Ertapenem	2-4	12-20	R	NWT
Imipenem	1	22-25 ⁴	S	NWT
Imipenem-relebactam	≤0.25 ⁵	22-24 ⁴	S	NWT
Meropenem	0.5-1	21-25 ⁴	S	NWT
Meropenem-vaborbactam	0.5	23-26	S	ECOFF NA
Aztreonam	>16	10-14	R	NWT
Aztreonam-avibactam	0.06-0.125	28-33	S	WT
Ciprofloxacin	≤0.03	28-33	S	WT
Levofloxacin	≤0.06	27-32	S	WT
Amikacin	2	19-24	S	WT
Gentamicin	0.5-1	17-24	S	WT
Tobramycin	0.5-1	18-23	S	WT
Tigecycline	0.125-0.25	23-26	S	WT
Colistin	0.25-0.5	-	S	WT
Trimethoprim-sulfamethoxazole	0.06	27-29	S	WT
Fosfomycin	0.5	24-28 ⁴	S	WT

ND: not determined; NA: not available.

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

²SIR-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>.

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

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

⁵Although 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.