

Supplementary material

Table S1 Inhibition zone diameters (mm) of donor strain, recipient strain, and transconjugants

	Strain	CTX	TET	AMP	CIP	SMZ	RIF
Donor Bacteria	<i>Escherichia coli</i> T413	12.36	11.98	6.78	10.66	6.80	25.70
Recipient Bacteria	<i>Escherichia coli</i> NK5449	26.56	22.90	18.98	25.68	23.42	7.84
	<i>Bacillus cereus</i> X524	34.72	25.88	18.92	20.52	6.92	12.36
Transconjugant	<i>Escherichia coli</i> NK5449J	13.88	15.64	6.80	22.00	23.04	6.84
	<i>Bacillus cereus</i> X524J	13.82	14.24	6.82	22.32	6.96	12.48

Note: values in bold indicate antimicrobial resistance.

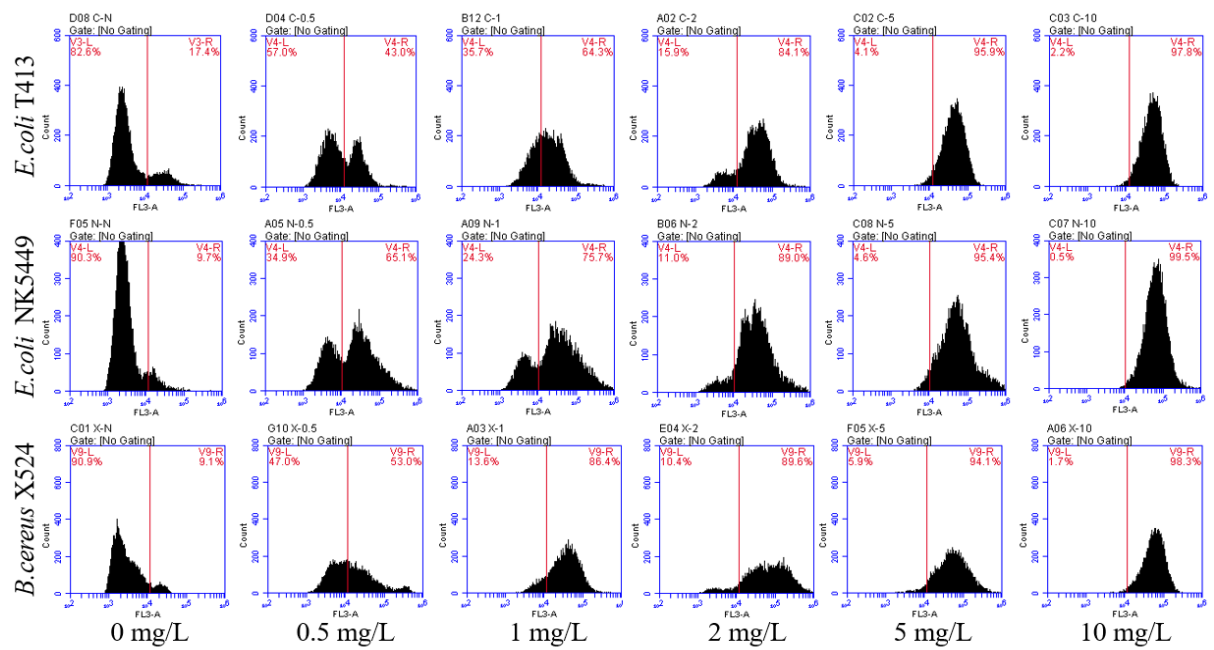


Fig. S1 Changes in cell membrane permeability of donor and recipient strains after chlorination

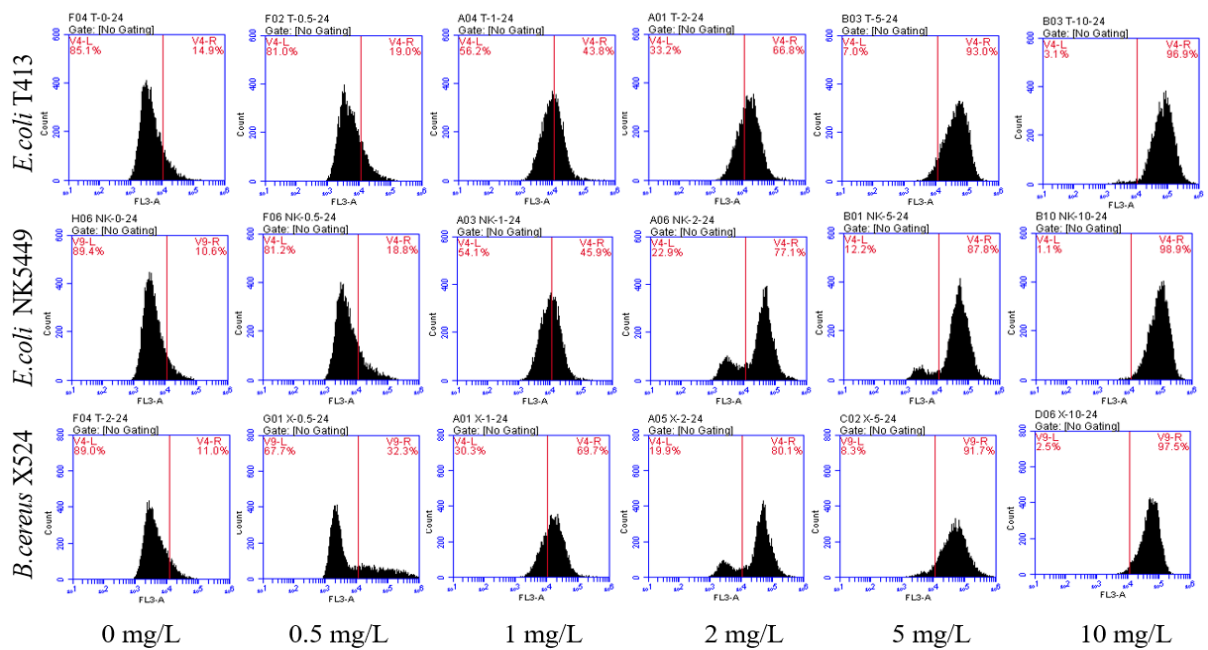
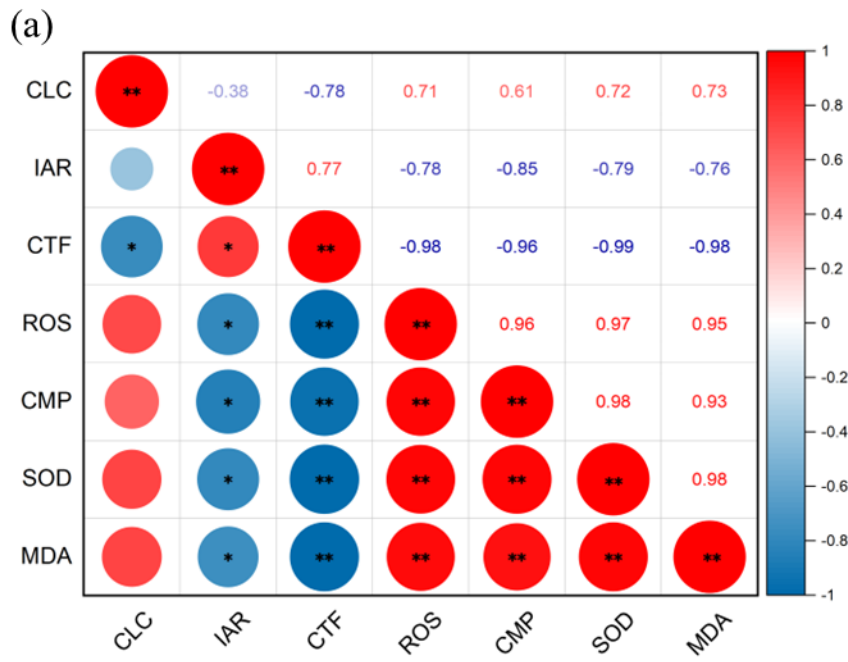
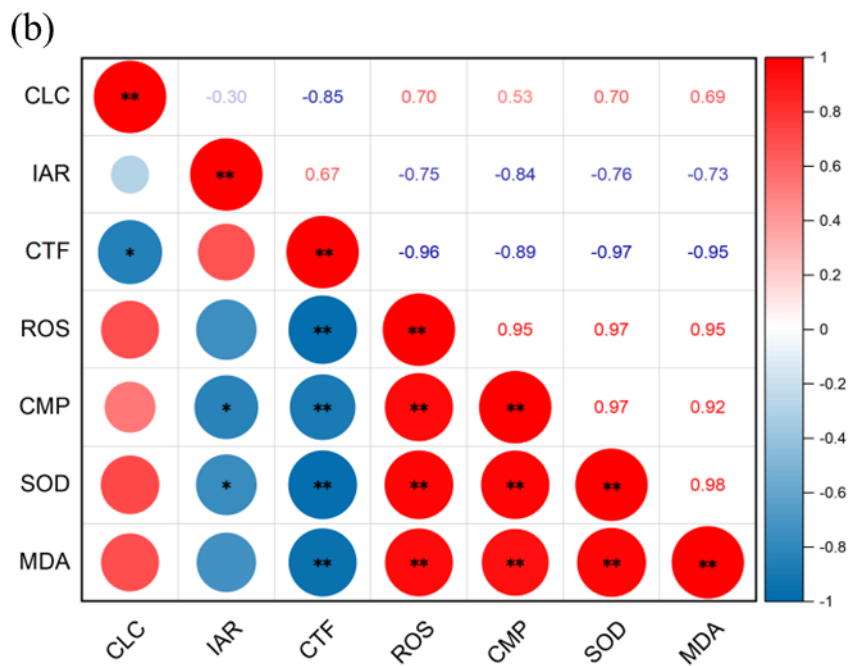


Fig. S2 Changes in cell membrane permeability of donor and recipient strains 24 h after chlorination



* $p \leq 0.05$ ** $p \leq 0.01$



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Fig. S3 Correlation analysis of various measured parameters in Model A(a) and Model B (b) under Treat 1

condition.

CLC: chlorine concentration; IAR: inactivation rate; CTF: conjugation frequency; ROS: intracellular reactive

oxygen species; CMP: cell membrane permeability; SOD: superoxide dismutase; MDA: malondialdehyde