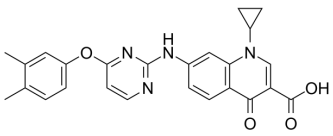
Anti-MRSA agent 5

Cat. No.:	HY-149013
CAS No.:	2490154-44-2
Molecular Formula:	$C_{25}H_{22}N_4O_4$
Molecular Weight:	442.47
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Anti-MRSA agent 5 (B14) is a potent MRSA agent with MIC_{50} values of 0.38 μg/mL and has low hERG activity with an IC_{50} values of >40 μM. Anti-MRSA agent 5 (B14) also has low cytotoxicity to mammal cells and unlikely to acquire bacterial resistance[1].
IC_{50} & Target	MIC: 0.38 μg/mL (MRSA); IC50: >40 Mm (hERG)
In Vitro	Anti-MRSA agent 5 (B14) is highly selective toxic in bacterial cells. Anti-MRSA agent has marginal inhibitory activities with an IC_{50} values of exceeding 40 μM. Anti-MRSA agent 5 (B14) has strong antibacterial activity for all five clinical isolates of MRSA (NRS-1, NRS-70, NRS-100, NRS-108, NRS-271) with MIC values between < 0.17 and 0.69 μg/mL.Anti-MRSA agent 5 (B14) inhibits all three clinical isolates of fluoroquinolone-resistant MRSA (19-25, 19-26, 19-27) and exhibits good potency against VISA[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Cytotoxicity Assay

Cell Line:	A549, MDA-MB-231, PC-3, ABAE.
Concentration:	0–400 μM
Incubation Time:	48h
Result:	Showed marginal inhibitory activities with anIC_{50} exceeding 40 μM and displayed highly selective toxicity toward bacterial cells.

REFERENCES

[1]. Runzhe Songa, et al, Design and synthesis of novel desfluoroquinolone-aminopyrimidine hybrids as potent anti-MRSA agents with low hERG activity, Bioorg Chem. 2020 Oct;103:104176.

Caution: Product has not been fully validated for medical applications. For research use only.

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