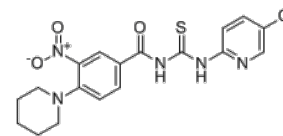


Product Name : MAC-545496
Cat. No. : PC-72426
CAS No. : 838810-96-1
Molecular Formula : C₁₈H₁₈ClN₅O₃S
Molecular Weight : 419.884
Target : Bacterial
Solubility : 10 mM in DMSO



Biological Activity

MAC-545496 (MAC545496) is an antivirulence compound that reverses β -lactam resistance in the community-acquired MRSA USA300 strain via inhibition on **GraR** function ($K_d < 0.1$ nM).

MAC-545496 could also serve as an antivirulence agent alone.

MAC-545496 attenuates MRSA virulence in *Galleria mellonella* larvae.

MAC-545496 inhibits biofilm formation and abrogates intracellular survival in macrophages.

GraR is a regulator that responds to cell-envelope stress and is an important virulence factor and determinant of antibiotic resistance.

MAC-545496 has value as a research tool to probe the GraXRS regulatory system and as an antibacterial lead series of a mechanism to combat drug-resistant *Staphylococcal* infections.

References

Omar M El-Halfawy, et al. *Nat Chem Biol.* 2020 Feb;16(2):143-149.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com