

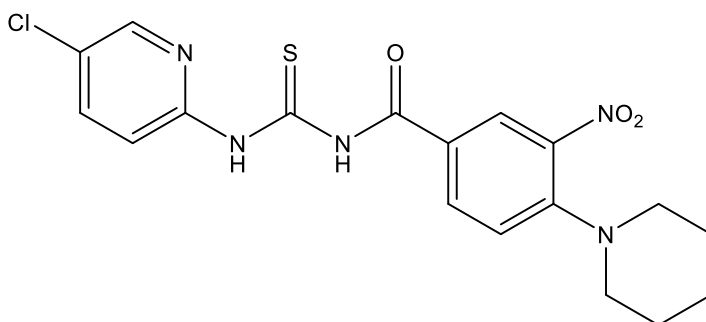
Catalog # 10-3951

MAC-545496

CAS# 838810-96-1

N-[(5-Chloropyridin-2-yl)carbamothioyl]-3-nitro-4-piperidin-1-ylbenzamide

Lot # FBA6275



MAC-545496 is an inhibitor of glycopeptide-resistance-associated protein R (GraR, also known as ApsR). GraR and its regulatory system are important for virulence of *S. aureus*. MAC-545496 is able to reverse β -lactam resistance in *S. aureus* in a *G. Mellonella* larvae model. 0.06 $\mu\text{g}/\text{mL}$ MAC-545496 lowered the minimum inhibitory concentration (MIC) for oxacillin against *S. aureus* below the CLSI clinical breakpoint. It lowered the β -lactam MIC from 512 to 8 $\mu\text{g}/\text{mL}$ against *S. aureus* USA300.

- 1) El-Halfawy *et al.* (2020), *Discovery of an antivirulence compound that reverses β -lactam resistance in MRSA*; Nat. Chem. Biol., **16** 143

PHYSICAL DATA

Molecular Weight:	419.88
Molecular Formula:	$\text{C}_{18}\text{H}_{18}\text{ClN}_5\text{O}_3\text{S}$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml)
Physical Description:	Yellow/orange solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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