Fig.S1

Stirring

0.01 Mol Fe^{3+}

40 mL DH_2O + 2 mL Glycerol

0.01 Mol NaOH

0.2 mol benzaldehyde derivative

1 Molar benzaldehyde derivative

Autoclave

180°C

Filteration, Washing

CuFeO_2

1% aq. acetic acid of chitosan solution

24h stirring

CuFeO_2 capped with Chitosan
**Fig. S2**

*P. aeruginosa* inoculated in Nutrient Broth for 12h.

Centrifuge for 15 min at 6000 rpm at RT

Add 200 μL CHCl3, vortex for 10-20 sec., and incubate it at RT for 5 min.

Add 1 mL of lysis buffer, vortex

Centrifuge at 13000 rpm for 10 min at 4 °C. Transfer 400 μL of supernatant to new 1.5 mL tube.

Add 800 μL of purification buffer and mix well. Incubate for 10 min at -20 °C.

Centrifuge at 13000 rpm for 15 min at 4 °C, wash the LPS pellet with 1 mL of 70% EtOH, and recentrifuge
Fig. S3A

(a)

(b)

(c)

Fig. S3B

(a)

(b)

(c)
Fig. S4

(a)

(b)

(c)