Supplemental Figures

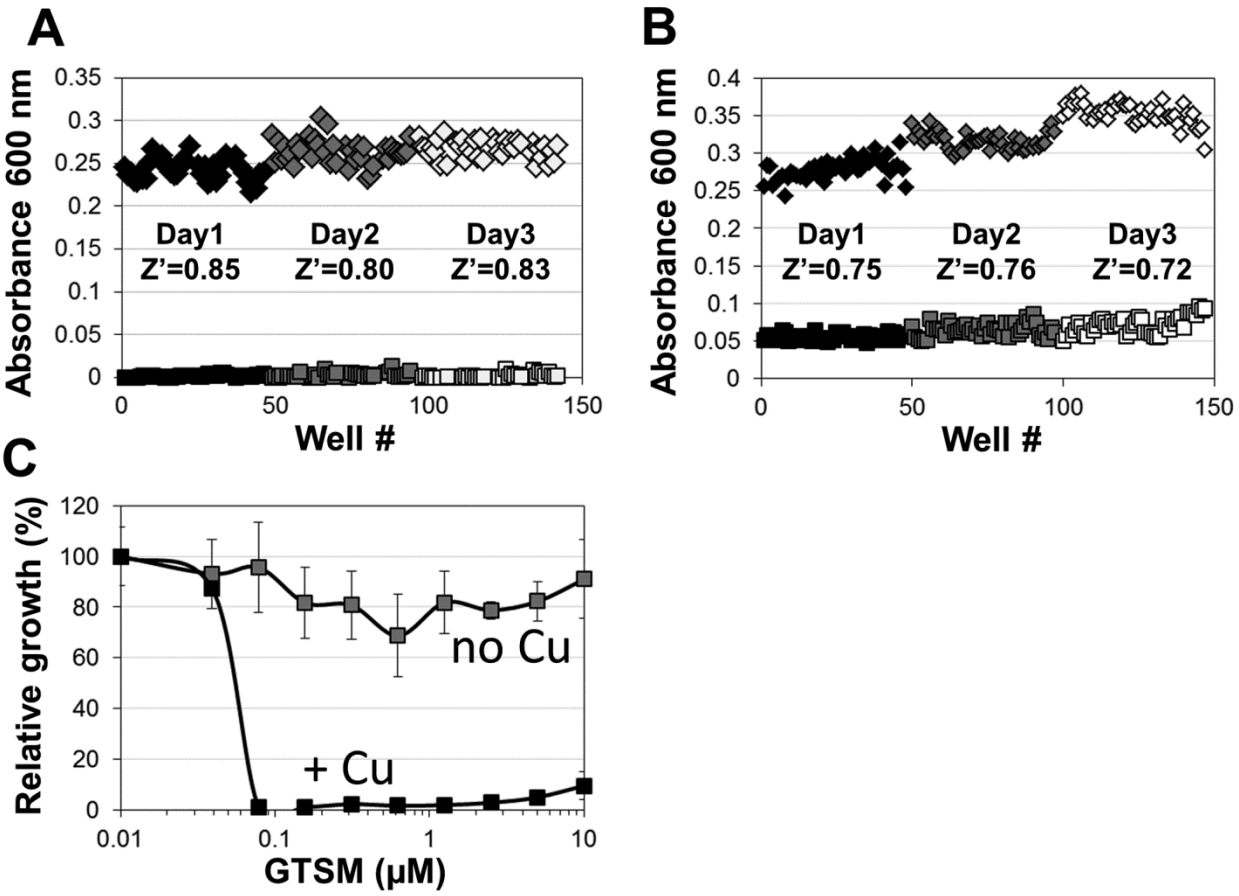

Figure S1: Assay performance. **(A)** Z-factor was determined in Mueller-Hinton medium using 2.5 µM neocuproine (positive growth control, diamonds) or neocuproine and copper (growth inhibitory condition, squares) on 3 independent days. Positive and negative samples were arranged on 96-well plates either in opposed quadrants (day 1, black), alternating columns (day 2, grey) or halves (day 3, light gray). **(B)** Z-factor determined in RPMI 1640 using with (no growth control, squares) or without (positive growth control, diamonds) 1 µM gentamicin. Positive and negative samples were arranged in checker board layout (day 1, black), alternating columns (day 2, gray) or quadrants (day 3, white). **(C)** Activity of GTSM against *S. aureus* in RPMI 1640 medium with (black) and without (grey) copper supplementation. Data are representative of 3 independent experiments. Error bars expressing standard deviation from 3 technical replicates. Y-axis is in log scale.

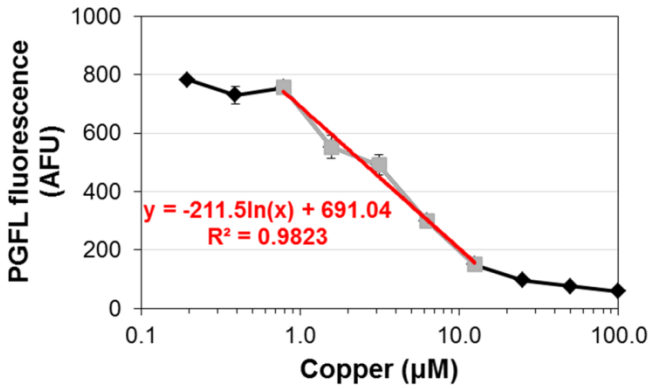

Figure S2: In vivo quenching of Phen Green FL by copper treated cells. *S.aureus* was treated with indicated copper concentrations for one hour, then washed once with EDTA and twice in HEPES buffer following resuspension in 5 µM Phen Green FL. An inverse correlation between copper concentration and Phen Green FL fluorescence was observed. Regression type was logarithmic (trendline in red) with excellent correlation between the range of 1 and 12.5 µM copper (gray values). Trendline was calculated using Microsoft Excel 2010. Formula and R^2 value of regression line are shown in the figure. Error bars represent standard deviation of the mean value of three replicates from the same experiment.

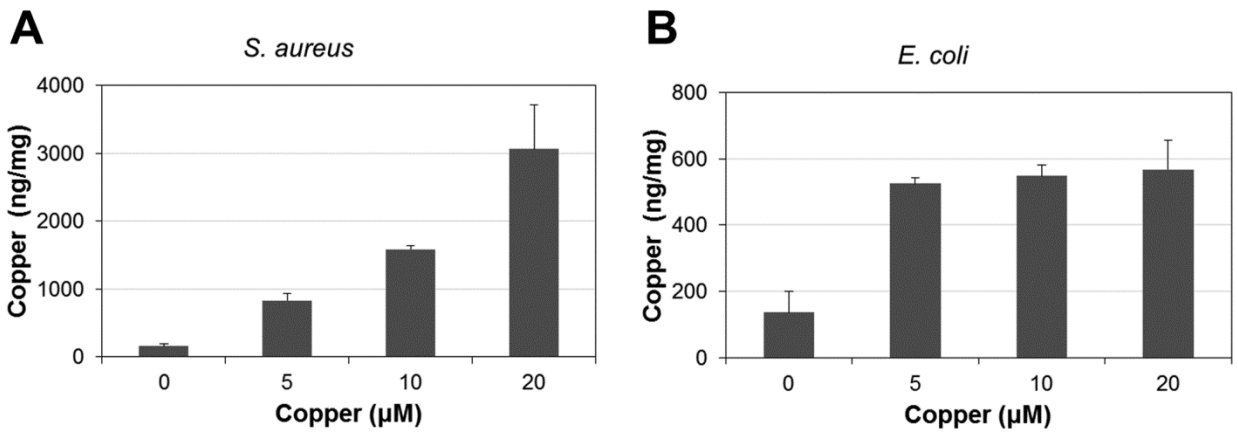

Figure S3: Cell copper content of **(A)** *S. aureus* and **(B)** *E. coli* exposed to increasing extracellular copper concentrations. Copper content was determined by inductively coupled plasma mass spectrometry (ICPMS) analysis. Copper content is expressed in ng copper per mg cells (dry weight). Error bars represent standard deviation of the mean of three replicates from one experiment.

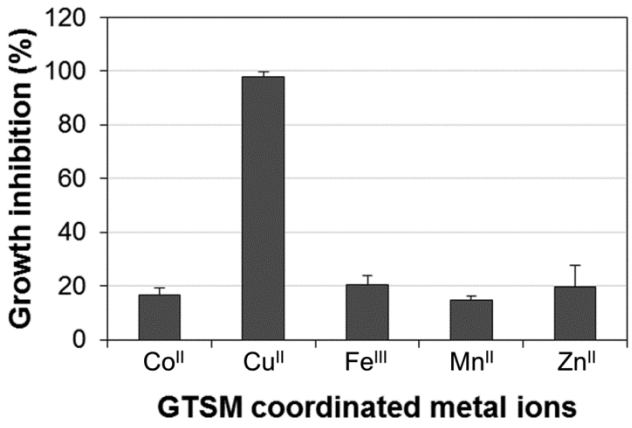

Figure S4: Antibacterial properties of GTSM metal complexes towards *S. aureus*. Metal complexes were prepared by mixing equimolar solutions (10 µM) of metal salts and GTSM. Complex formation was indicated by a color change except for Zn^{II}. Only the copper complex was a potent inhibitor of *S. aureus*. Percent of inhibition was calculated according to the formula: % inhibition = 100x(1-(OD_{600} of treated sample/OD_{600} of untreated sample)). Data are representative of two independent experiments. Error bars indicate standard deviation of the mean of three replicates per experiment.