Supporting Information

Quaternary ammoniumyl chitosan derivatives for eradication of *Staphylococcus aureus* biofilms

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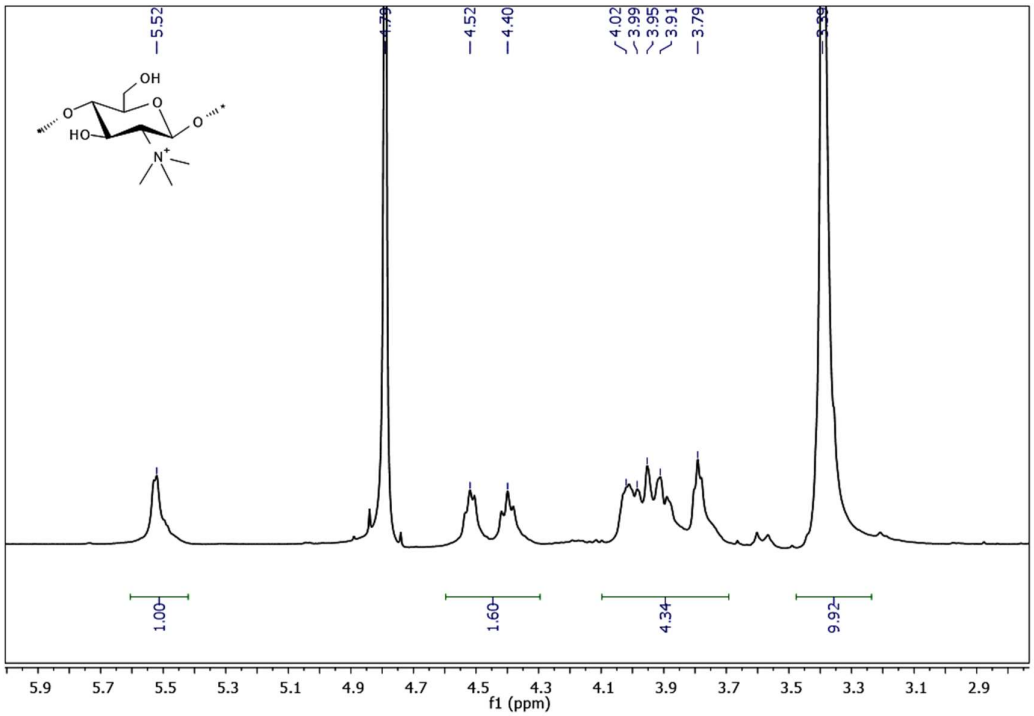
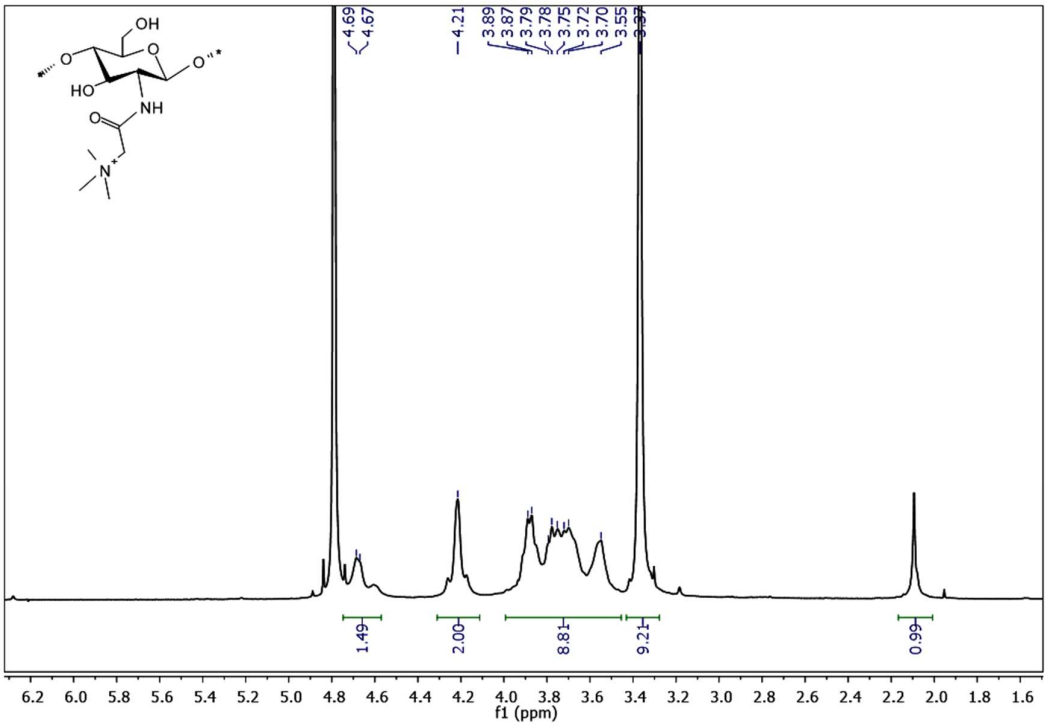
1. ^{1}H-NMR Spectra for the chitosan derivatives

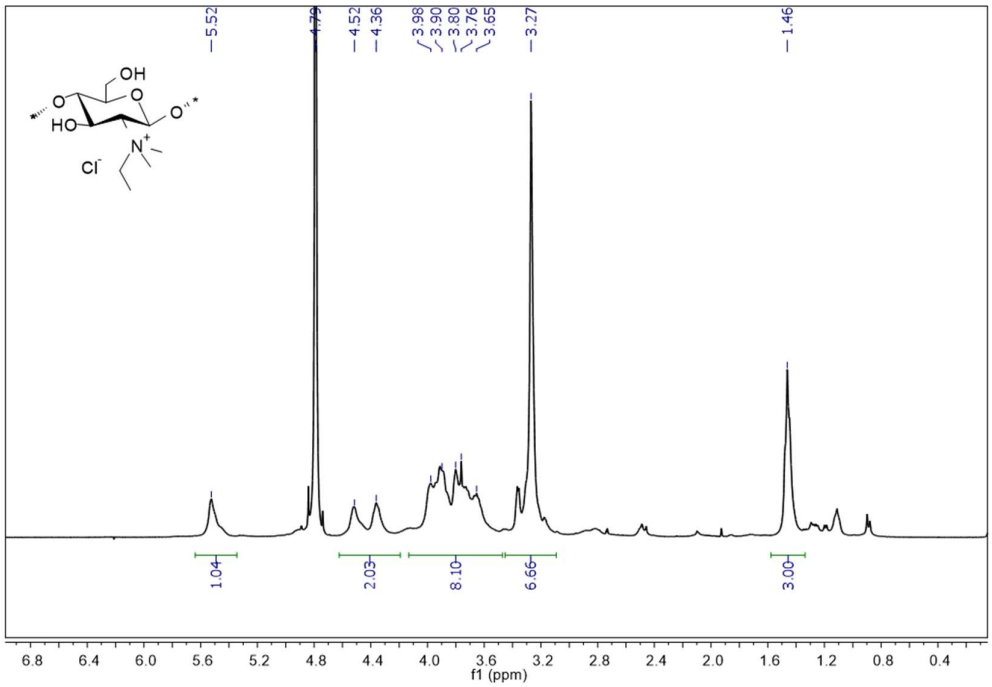
N,*N*,*N*-trimethyl chitosan (1)



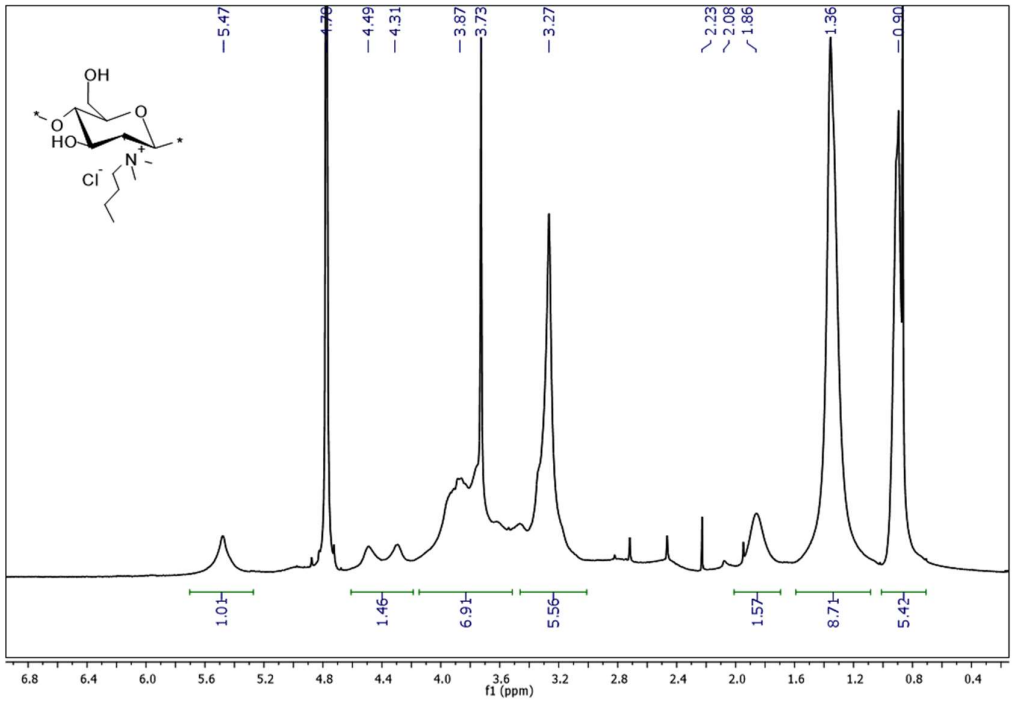
N-(2-(*N*,*N*,*N*-trimethylammoniumyl)acetyl) chitosan (2)



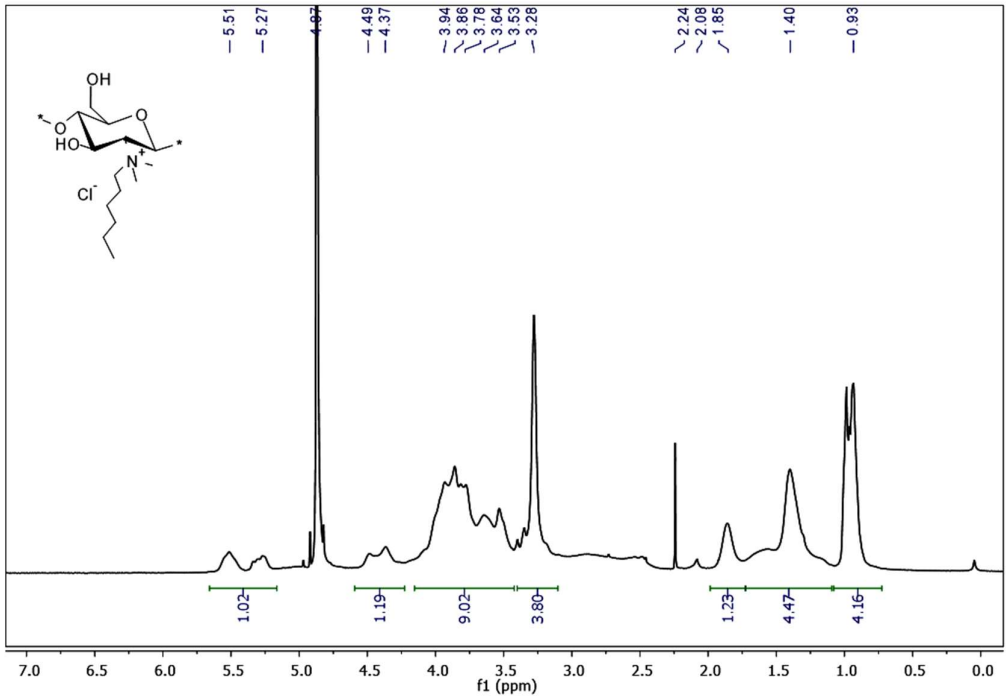
***N*-ethyl-*N*,*N*-dimethyl chitosan (3)**



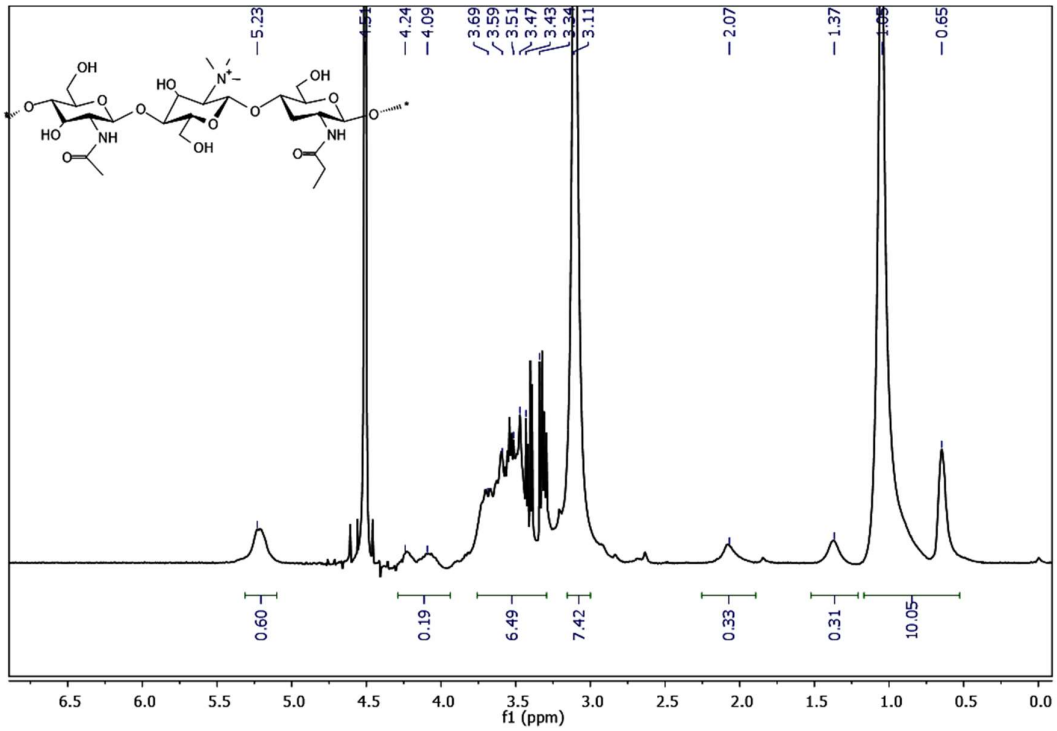
***N*-butyl-*N*,*N*-dimethyl chitosan (4)**



***N*-hexyl-*N*,*N*-dimethyl chitosan (5)**



***N*-acetyl-*N*-stearoyl-*N'*,*N"*,*N"*-trimethyl chitosan (6)**



2. Confocal Laser Scanning Microscope images

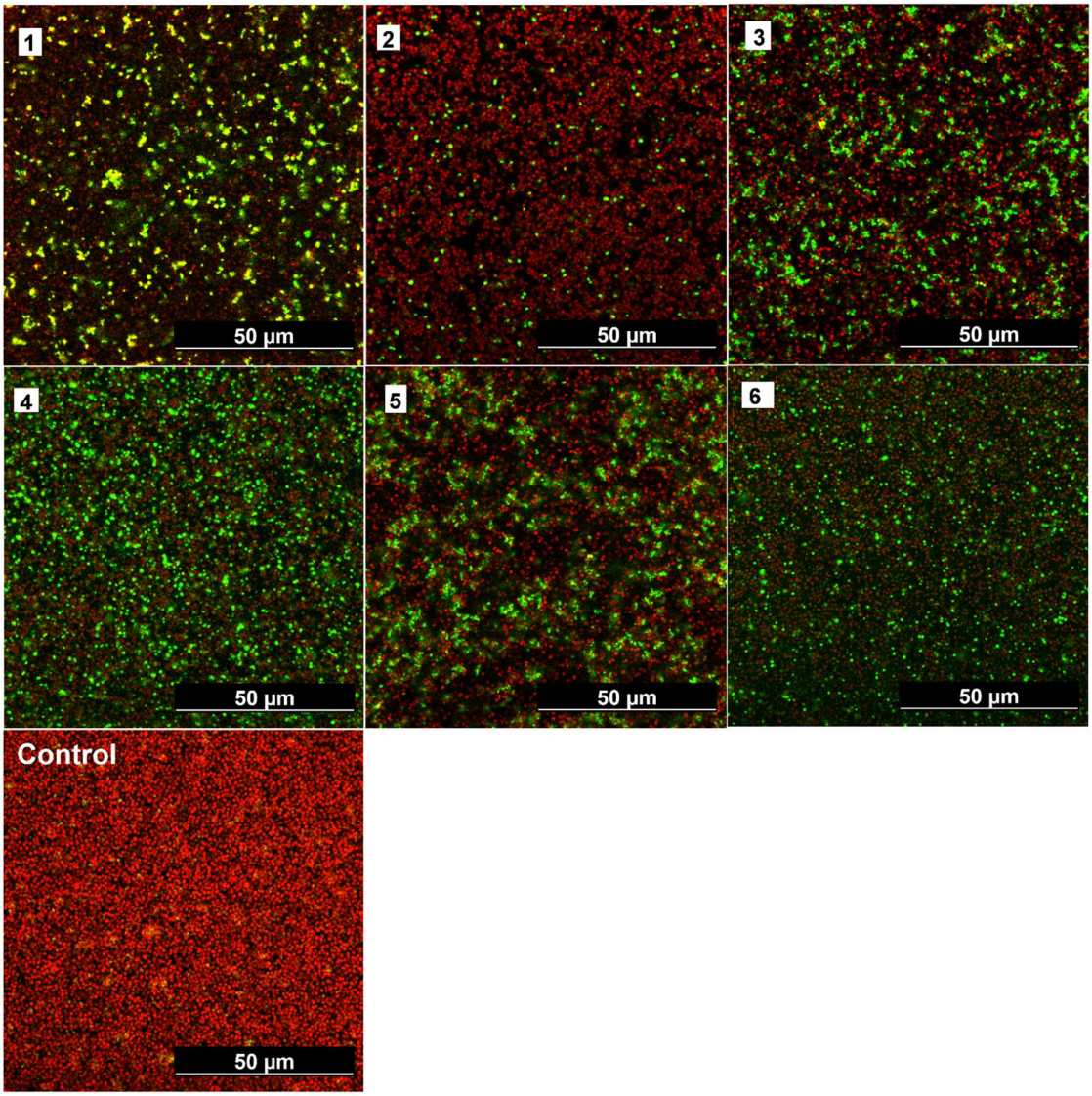


Figure S1. *S. aureus* biofilms after treatment with the quaternary chitosan derivatives were stained with DNA-binding stains that distinguish living (red) and dead (green) cells based on membrane integrity. (1= 100xMBC TMC; 2= 100xMBC TMAC; 3= 100xMBC N-ethyl-N,N-dimethyl chitosan; 4= 100xMBC N-butyl-N,N-dimethyl chitosan; 5= 100xMBC N-hexyl-N,N-dimethyl chitosan; 16= 100xMBC N-acetyl-N-stearoyl-N,N,N-trimethyl chitosan; Control= Growth control).