

Supplementary Materials: Novel Amino-Pyridine Functionalized Chitosan Quaternary Ammonium Derivatives: Design, Synthesis, and Antioxidant Activity

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Table S1. The measurements of antioxidant activity for chitosan and chitosan derivatives.

ROS (Concentration (mg/mL))	Scavenging Effect (%; Mean \pm SD)							
	Chitosan	3A	3B	3C	3D	3E	3F	
Hydroxyl-radical	0.1	0	0	1.4 \pm 2.05	67.8 \pm 1.06	25.4 \pm 2.05	34.6 \pm 2.12	31.4 \pm 1.83
	0.2	0	16.6 \pm 1.02	19.8 \pm 1.75	79.6 \pm 1.06	53.7 \pm 1.97	62.1 \pm 2.19	58.4 \pm 1.06
	0.4	3.5 \pm 0.99	34.1 \pm 1.13	60.9 \pm 1.41	90.7 \pm 0.56	67.8 \pm 1.91	82.1 \pm 2.26	74.3 \pm 1.97
	0.8	10.6 \pm 1.14	50.8 \pm 2.27	79.1 \pm 2.05	98.9 \pm 2.26	79.3 \pm 1.97	100	84.6 \pm 2.62
	1.6	33.4 \pm 2.69	63.6 \pm 2.05	100	100	92.5 \pm 1.96	100	100
DPPH-radical	0.1	5.82 \pm 1.85	16.9 \pm 1.86	25.5 \pm 2.11	19.8 \pm 1.93	16.6 \pm 2.37	8.7 \pm 2.25	36.7 \pm 2.77
	0.2	13.9 \pm 1.83	27.4 \pm 1.77	29.7 \pm 2.36	42.7 \pm 2.21	23.4 \pm 2.01	30.1 \pm 2.64	47.3 \pm 2.0
	0.4	21.8 \pm 1.40	36.3 \pm 2.05	38.8 \pm 2.49	67.9 \pm 2.18	32.5 \pm 1.08	53.4 \pm 2.71	57.4 \pm 1.71
	0.8	36.8 \pm 17.6	48.1 \pm 2.03	53.2 \pm 2.35	82.9 \pm 2.81	45.9 \pm 2.26	74.6 \pm 2.50	66.7 \pm 1.70
	1.6	53.7 \pm 2.69	70.1 \pm 2.41	85.7 \pm 2.06	92.1 \pm 2.06	78.6 \pm 2.41	88.4 \pm 3.12	79.6 \pm 2.76