Supplementary informations

HA-EDA $^1$H-NMR spectrum

The signal at $\delta$ 1.9 is attributable to the acetylic protons $-$NH-CO-$\text{CH}_3$ of the N-acetylglucosamine of HA.

The signal at $\delta$ 3.2 is attributable to protons $-$CO-NH-$\text{CH}_2$-$\text{CH}_2$-$\text{NH}_2$ of EDA.

The signals from $\delta$ 3.3 to $\delta$ 3.8 are attributable to the pyranosil protons and to $\text{CH}_2$ protons of both glucuronic acid and N-acetylglucosamine of HA. Also protons $-$CO-NH-$\text{CH}_2$-$\text{CH}_2$-$\text{NH}_2$ of EDA are overlapped in these signals.

Signal at $\delta$ 4.5 is attributable to the anomeric protons of HA.