

Figure S1. The standard curve of xylose

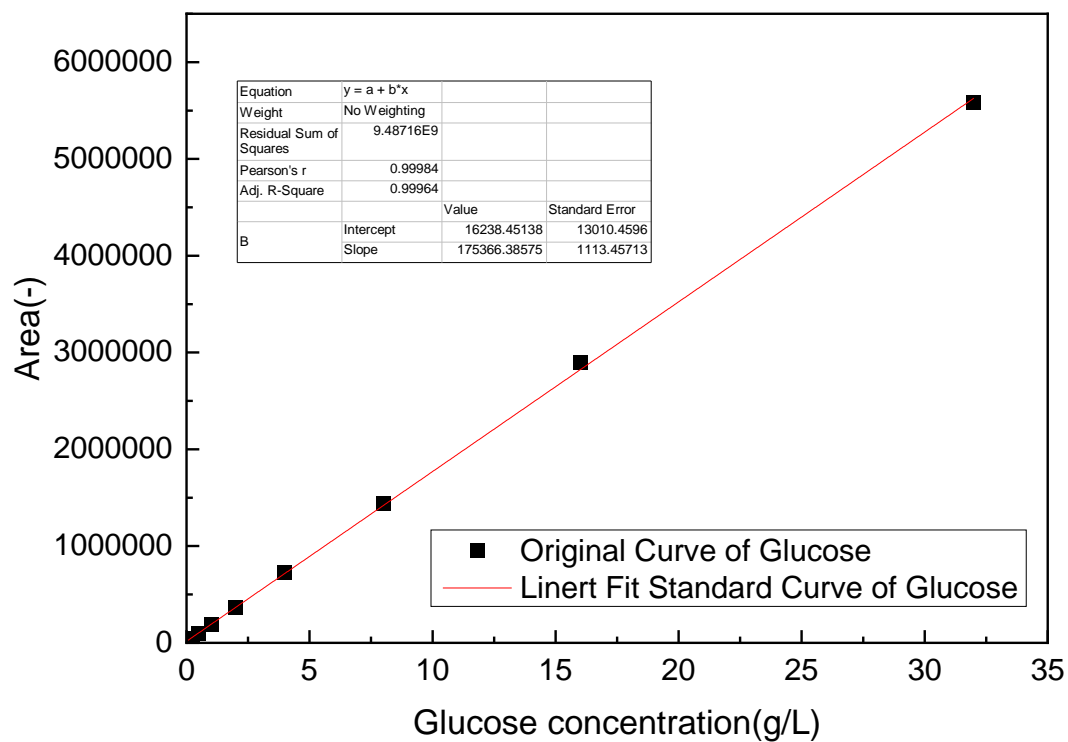


Figure S2. The standard curve of glucose

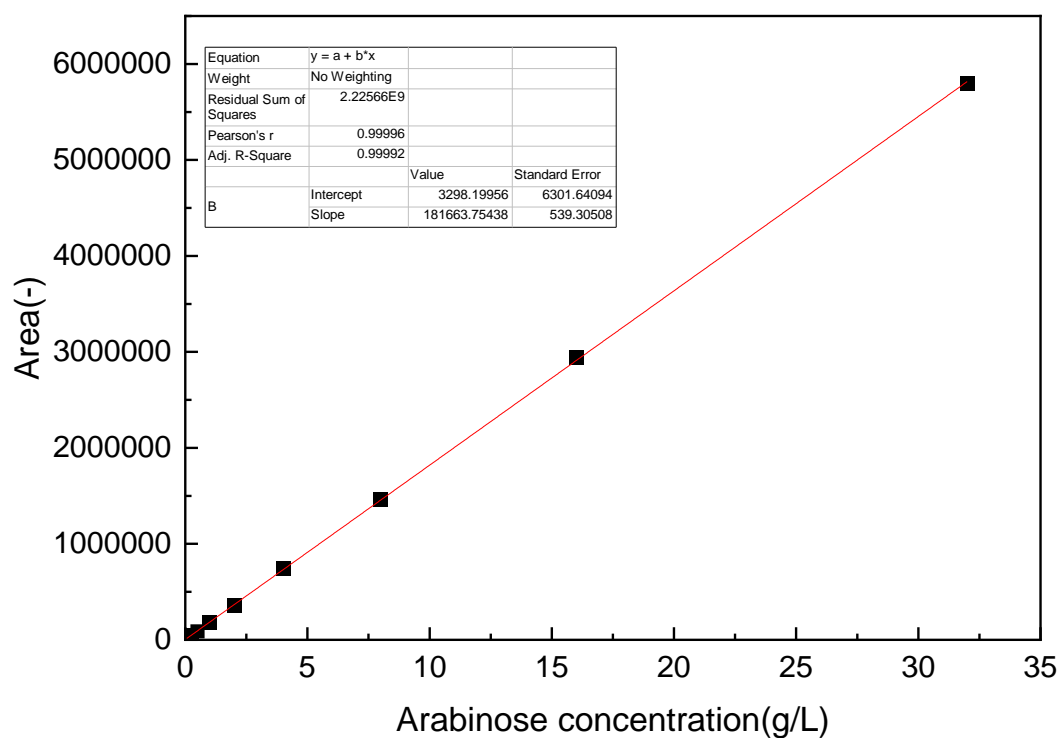


Figure S3. The standard curve of arabinose

The regression equation for the standard curve is as follows:

Xylose $Y = 30677.78811 + 167839.86426X$, $R^2 = 0.9996$;

Glucose $Y = 16238.45138 + 175366.38575X$, $R^2 = 0.9996$;

Arabinose $Y = 3298.19956 + 181663.75438X$, $R^2 = 0.9999$.

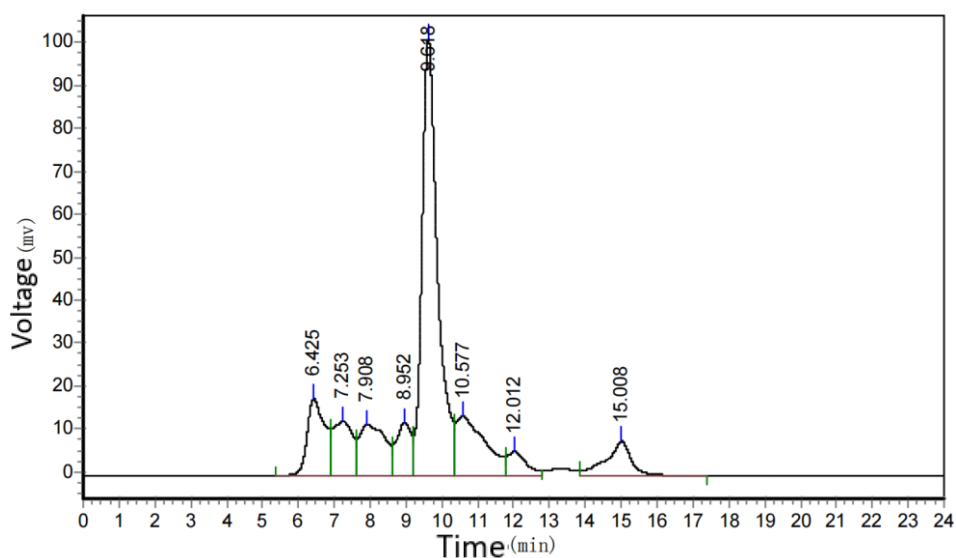


Figure S4. HPLC of sugar solution (CC particle size at 0.25~0.45 mm, temperature at 160 °C, stirring speed at 600 r/min, time at 2 h, H₂ pressure at 1.5 MPa, CW solid-to-solid ratio at 3:10, CAC solid - to - liquid ratio of 1:10)

Glucose:8.952; xylose: 9.618; arabinose:10.577.

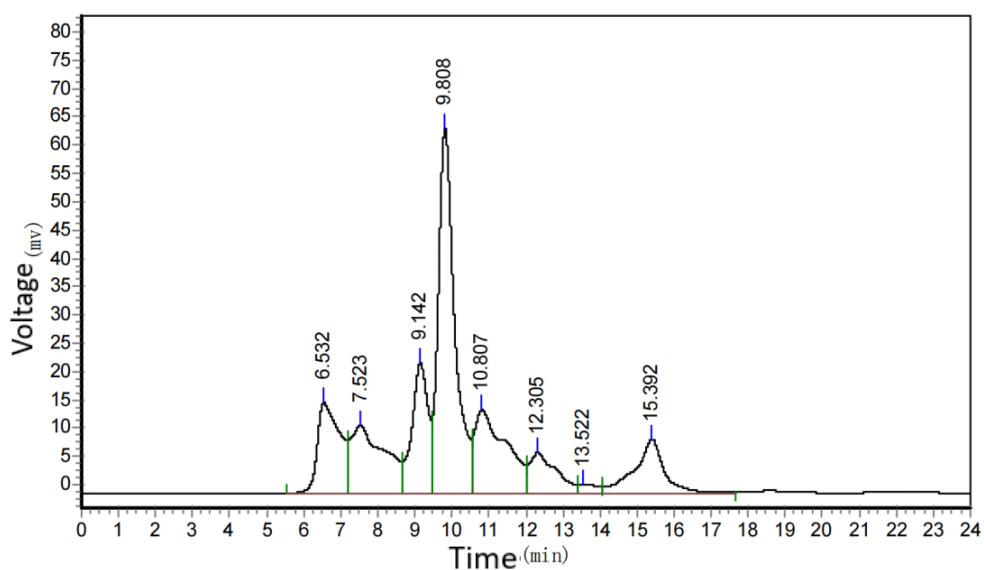


Figure S5. HPLC of sugar solution (CC particle size at 0.25~0.45 mm, temperature at 150 °C, stirring speed at 500 r/min, time at 2 h, H₂ pressure at 1.5 MPa, CW solid-to-solid ratio at 3:10, CAC solid - to - liquid ratio of 1:10)
Glucose:9.142; xylose: 9.808; arabinose:10.807.

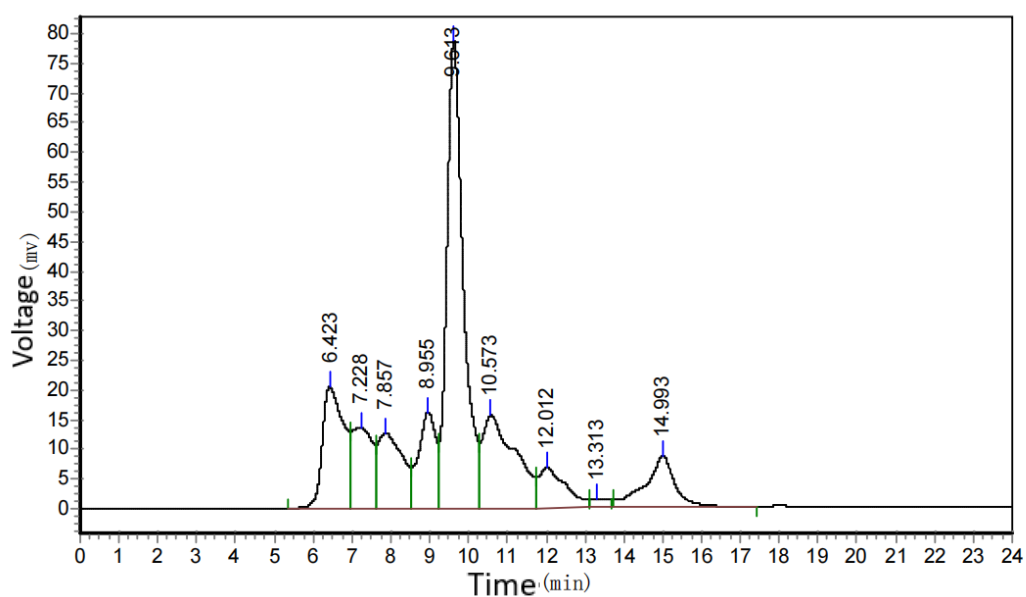


Figure S6. HPLC of sugar solution (CC particle size at 0.25~0.45 mm, temperature at 150 °C, stirring speed at 700 r/min, time at 2 h, H₂ pressure at 1.5 MPa, CW solid-to-solid ratio at 3:10, CAC solid - to - liquid ratio of 1:10)
Glucose:8.955; xylose: 9.613; arabinose:10.573.

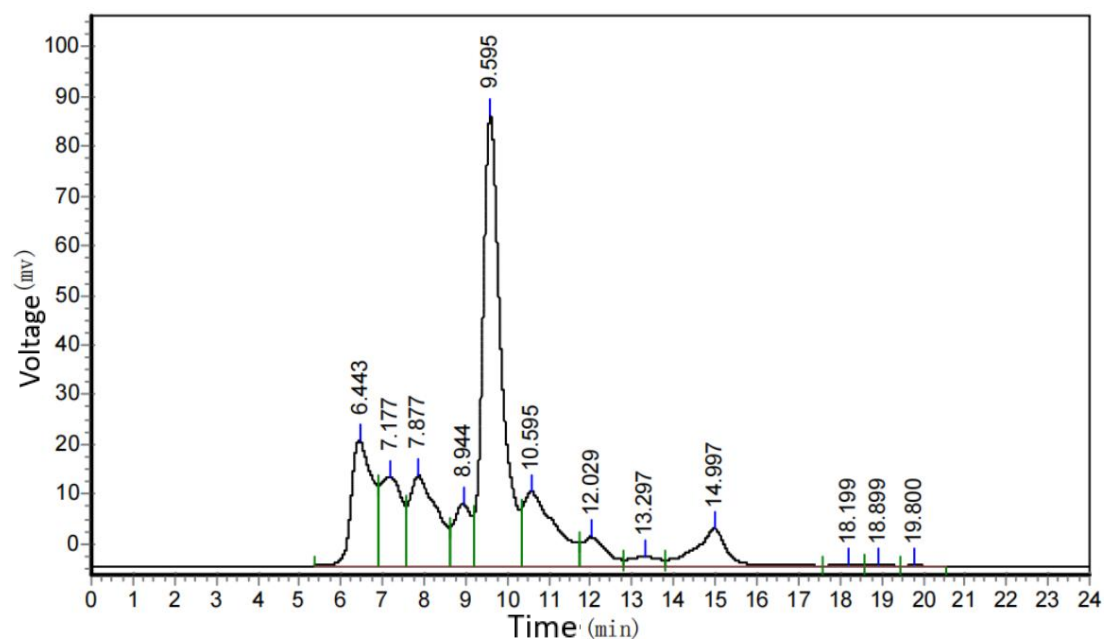


Figure S7. HPLC of sugar solution (CC particle size at 0.25~0.45 mm, temperature at 160 °C, stirring speed at 600 r/min, time at 2 h, H₂ pressure at 1.5 MPa, CW solid-to-solid ratio at 3:10, CAC solid - to - liquid ratio of 1:11)
Glucose:8.944; xylose: 9.595; arabinose:10.595.

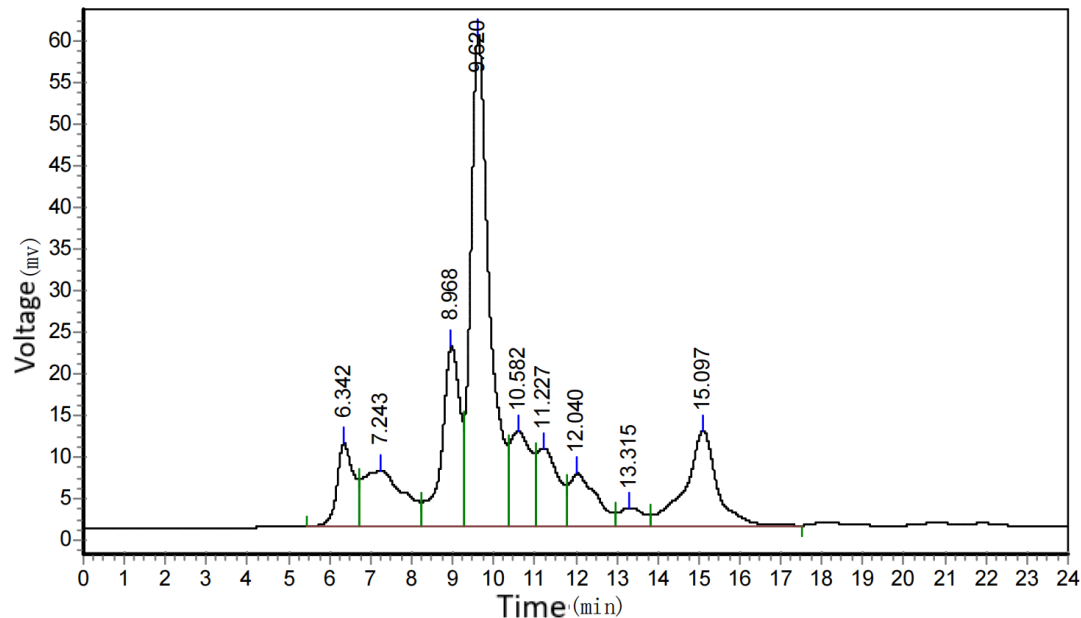


Figure S8. HPLC of sugar solution (CC particle size at 0.25~0.45 mm, temperature at 170 °C, stirring speed at 600 r/min, time at 2 h, H₂ pressure at 1.5 MPa, CW solid-to-solid ratio at 3:10, CAC solid - to - liquid ratio of 1:10)
Glucose:8.968; xylose: 9.620; arabinose:10.582.