

Supplementary Information (SI)

For

The access of *Trichoderma reesei* 6A to cellulose is blocked by isolated hemicelluloses and their derivatives in biomass hydrolysis

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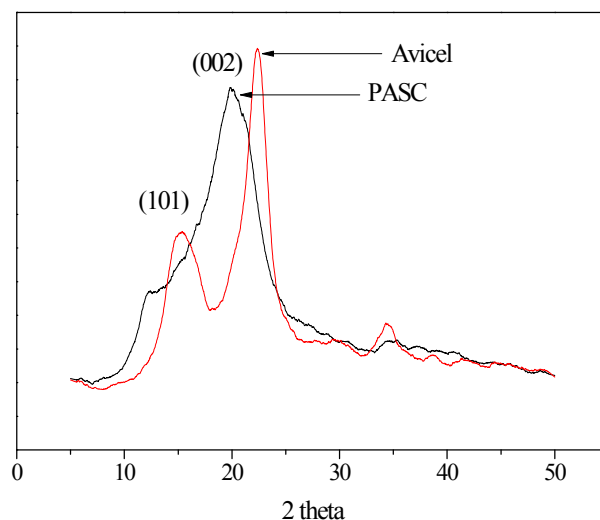


Figure S1. XRD analysis of Avicel and phosphoric acid swollen cellulose (PASC).

The cellulose crystallinity index (CI) of the samples was measured by XRD using a Rigaku D/max-3C generator (Rigaku Corporation, Japan). The dried samples were scanned in 2θ range from 5° to 50° using the steps of 0.02° in width, and using Cu/ $K\alpha$ radiation (1.54 \AA) generated at 35 kV and 35 mA. The CI of cellulose was calculated from the XRD spectra as follows:

$$\text{CrI} = \frac{I_{002} - I_{\text{am}}}{I_{002}} \times 100$$

In which I_{002} is the maximum intensity of the (002) lattice diffraction, and I_{am} is the peak of the amorphous portion evaluated as the minimum intensity between the (101) and (002) lattice planes.