Supporting information

Synthesis of hierarchical beta zeolite by using a bifunctional cationic polymer and the improved catalytic performance

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Fig. S1 XRD patterns of the as-synthesized samples obtained under static condition. The number shown in the figure refers to the sample name given in Table 1.
**Fig. S2** XRD patterns of the as-synthesized samples obtained by the assistance of seeds under rotational condition. The number shown in the figure refers to the sample name given in Table 2.
Fig. S3 Thermogravimetric (TG) and differential scanning calorimetry (DSC) curves of the as-synthesized sample 3.
Fig. S4 $^{13}$C NMR spectra of PDADMA solution (a) and the liquid by dissolving the as-synthesized beta product in HF solution (b).
**Fig. S5** N$_2$ adsorption-desorption isotherms of the as-synthesized beta (sample 13 was degassed at 160 °C under vacuum for 10 h prior to the measurement).
**Fig. S6** N\textsubscript{2} adsorption-desorption isotherms (a) and pore size distribution curves (b) of the samples crystallized for different times (The initial gel has the same molar composition as that of sample 3).

**Fig. S7** Micropore size distribution curves of the samples crystallized for 1d and 9d (The initial gel has the same molar composition as that of sample 3).