Electronic Supplementary Information

The XRD patterns, N_2 adsorption/desorption isotherms and ²⁹Si MAS NMR spectra of SBA-15 before and after the silylation with 3-(aminopropyl)trimethoxysilane are shown in Fig. S1, Fig. S2 and Fig. S3, respectively. These results confirmed that aminopropyl silyl group was successfully immobilized on the pore surface of SBA-15 with the original pore structure maintained.

Fig. S4 depicts the TG-DTA curves of the silylated SBA-15 synthesized with varied amount of the added silane coupling reagent (1.2NH₂-SBA and 1.9NH₂-SBA). From the results, the successful formation of amine containing SBA-15 with controlled amount of the attached amine was shown.

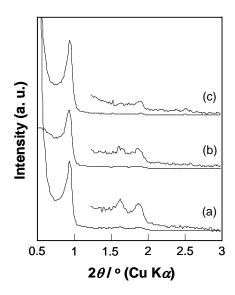


Fig. S1 XRD patterns of (a) SBA-15, (b) $1.2NH_2$ -SBA and (c) $1.9NH_2$ -SBA.

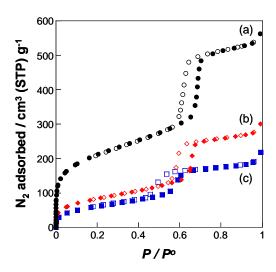


Fig. S2 N_2 adsorption (filled)/desorption (open) isotherms of (a) SBA-15, (b) $1.2NH_2$ -SBA and (c) $1.9NH_2$ -SBA.

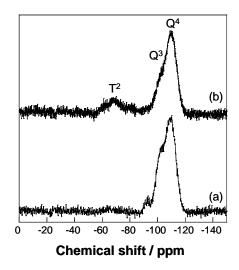


Fig. S3 29 Si MAS NMR spectra of (a) SBA-15 and (b) 1.2NH₂-SBA.

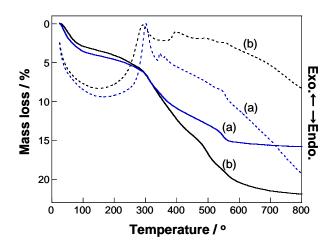


Fig. S4 TG (solid)-DTA (dashed) curves of (a) 1.2NH₂-SBA and (b) 1.9NH₂-SBA.