

Supporting Information

A Phospho-Directed Macroporous Alumina-Silica Nanoreactor with Multi-Functions

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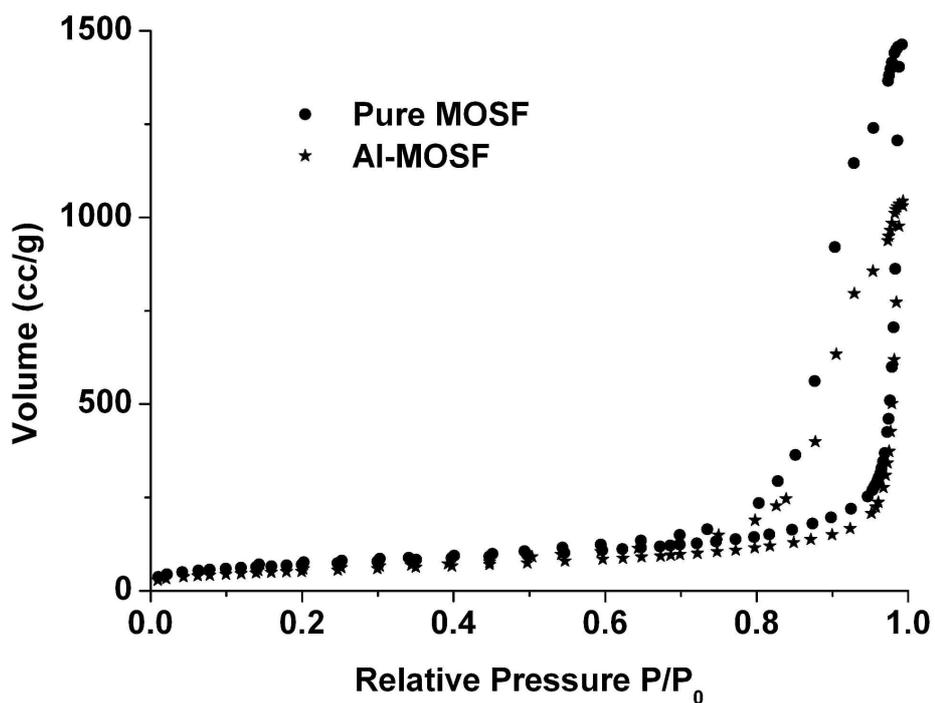


Figure SI-1. Nitrogen adsorption isotherms of MOSF and Al-MOSF.

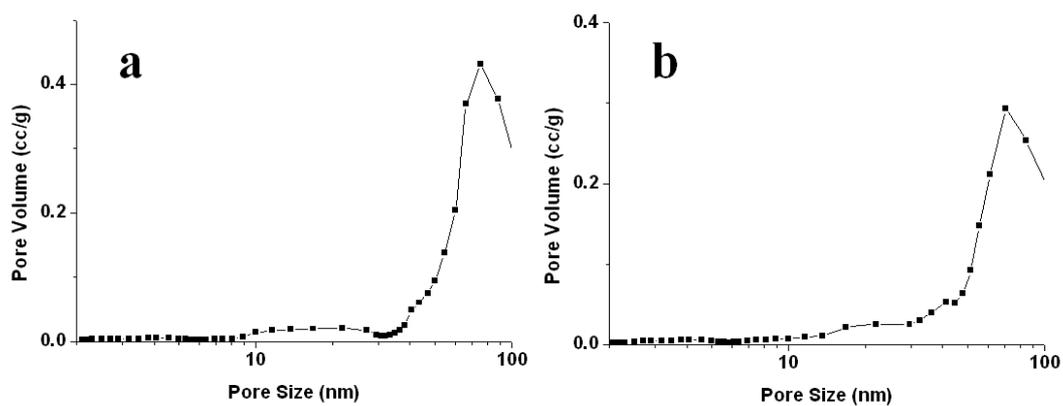


Figure SI-2. Pore size distributions of a) MOSF and b) Al-MOSF calculated from the adsorption branch using the BdB model.

Table SI-1. Detailed information of the observed phosphorylated peptides obtained from tryptic digestion of α -casein S1 and S2, and β -casein

Peptide sequence	Number of phosphate groups	m/z(Da)
TVDMESTEVEFTK (α -S2-(153–164))	1	1466.6
TVDMESTEVEFTKK (α -S2-(153–165))	1	1594.7
VPQLEIVPNSAEER (α -S1-(121–134))	1	1660.7
DIGSESTEDQAMEDIK (α -S1-(58–73))	2	1927.6
YKVPQLEIVPNSAEER (α -S1-(119–134))	1	1951.9
FQSEEQQTEDELQDK (β -C-(33–48))	1	2061.7
FQSEEQQTEDELQDKIHPF (β -C-(33–52))	1	2556.2
NTMEHVSSSEESIISQETYK (α -S2-(17–36))	4	2618.0
QMEAESISSSEEIVPNSVEAQK (α -S1-(74–94))	5	2720.9
EKVNELSKDIGSESTEDQAMEDIK (α -S1-(50–73))	3	2935.1
RELEELNVPGEIVESLSSEESITR (β -C-(16–40))	4	3122.2
KNTMEHVSSSEESIISQETYKQEK (α -S2-(16–39)) ^c	4	3132.2