Supporting Information For

Surface Engineering on Mesoporous Silica Chips for Enriching Low Molecular Weight Phosphorylated Proteins

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Figure S.1. Schematic representation of 2-step postsynthetic functionalization of mesoporous silica thin films with metal ion (Zr⁴⁺ or Ti⁴⁺).

M = Ti or Zr
Figure S.2. MALDI TOF spectra of fractionated peptides processed by Ti$^{4+}$ immobilized chip from (a) raw α-casein, (b) trypsinized α-casein, (c) trypsinized α-casein treated with phosphatase, and (d) raw α-casein treated with phosphatase.
Figure S.3. MALDI TOF spectra of fractionated peptides processed by Ga$^{3+}$ immobilized chip from (a) raw $\alpha$-casein, (b) trypsinized $\alpha$-casein, (c) trypsinized $\alpha$-casein treated with phosphatase, and (d) raw $\alpha$-casein treated with phosphatase.