



Article

How Reversible Are the Effects of Fumed Silica on Macrophages? A Proteomics-Informed View

Anaëlle Torres ¹, Bastien Dalzon ¹, Véronique Collin-Faure ¹, H  l  ne Diemer ², Daphna Fenel ³, Guy Schoehn ³, Sarah Cianf  rani ², Marie Carri  re ⁴ and Thierry Rabilloud ^{1,*}

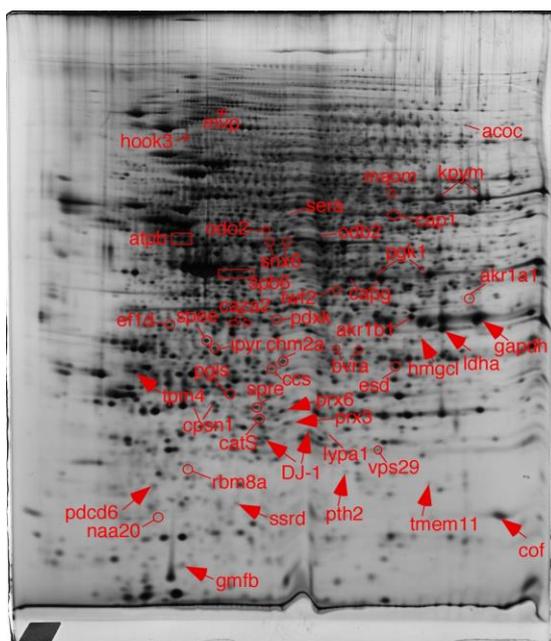
¹ Laboratory of Chemistry and Biology of Metals, University Grenoble Alpes, CNRS, CEA, UMR 5249, CEDEX 09, 38054 Grenoble, France; anaëlle.torres@cea.fr (A.T.); bastien.dalzon@cea.fr (B.D.); veronique.collin@cea.fr (V.C.-F.)

² Laboratoire de Spectrom  trie de Masse BioOrganique, Universit   de Strasbourg, CNRS, IPHC UMR 7178, F-67087 Strasbourg, France; hdiemer@unistra.fr (H.D.); sarah.cianferani@unistra.fr (S.C.)

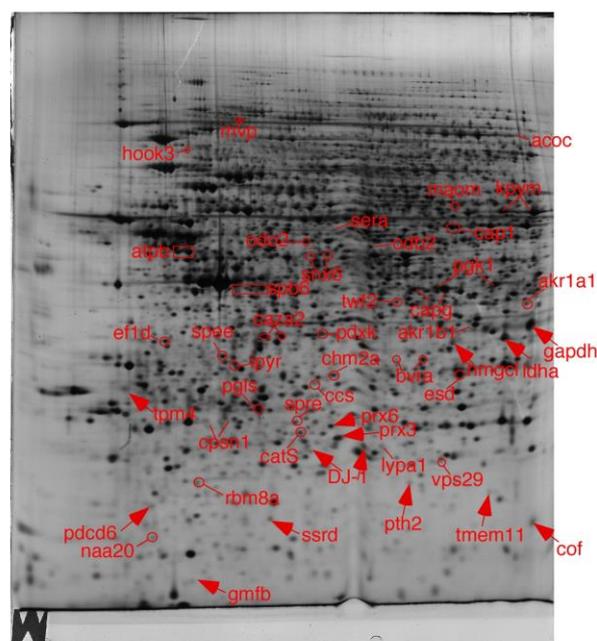
³ Institute for Structural Biology, University Grenoble Alpes, CNRS, CEA, F-38000 Grenoble, France; daphna.fenel@ibs.fr (D.F.); guy.schoehn@ibs.fr (G.S.)

⁴ Chimie Interface Biologie pour l'Environnement, la Sant   et la Toxicologie (CIBEST), University Grenoble-Alpes, CEA, CNRS UMR 5819, IRIG-SyMMES, F-38054 Grenoble, France; marie.carriere@cea.fr

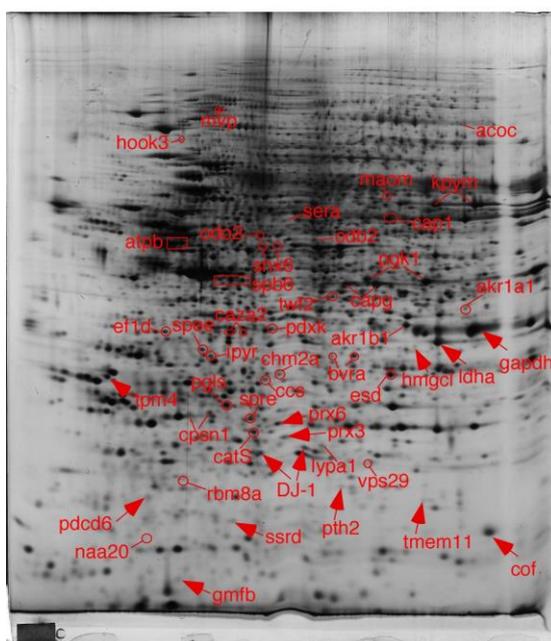
* Correspondence: thierry.rabilloud@cnrs.fr



A



B



C

Supplementary Figure 1:

Annotated gel images

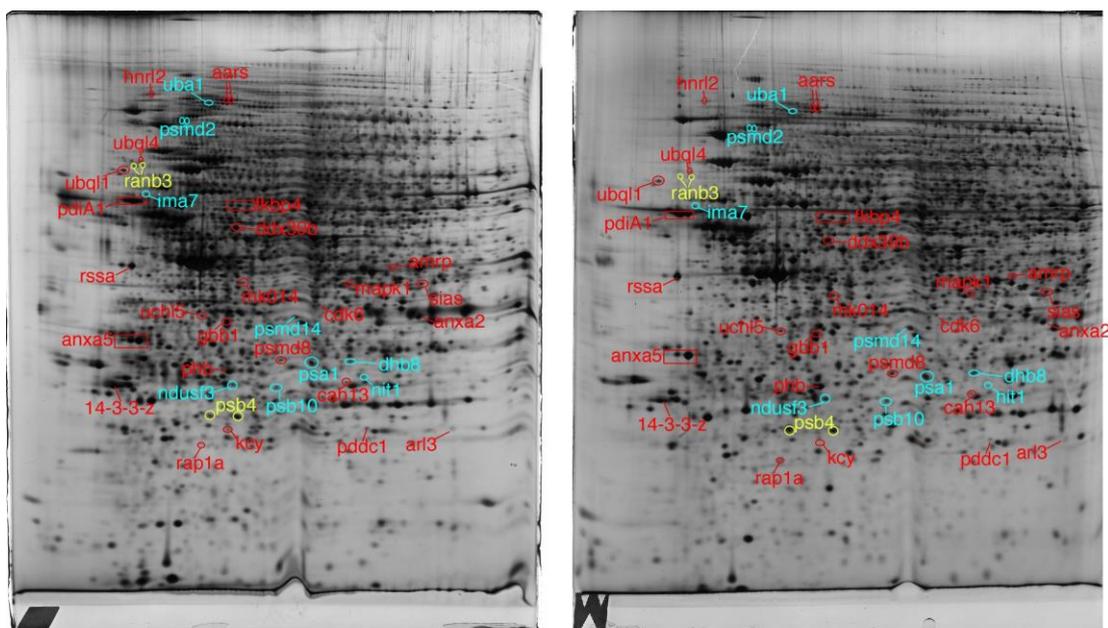
A: control, unexposed cells

B : cells exposed to pyrolytic silica for 24 hours and collected just after exposure

C: cells exposed to pyrolytic silica for 24 hours, and left to recover without silica for 72 hours prior to harvesting

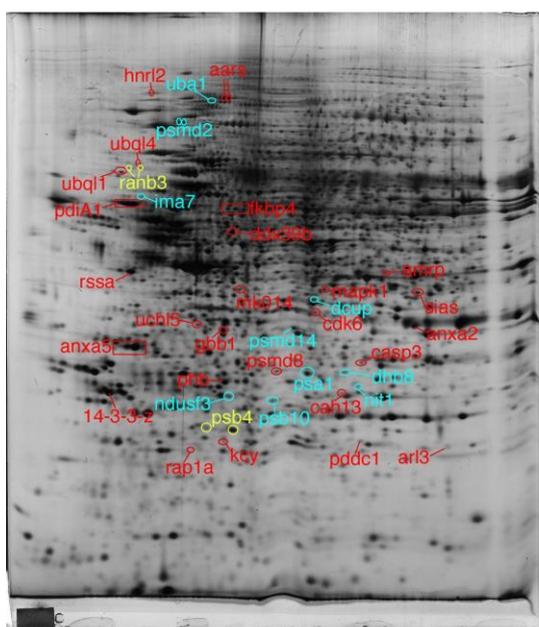
Proteins belonging to central metabolism, endosome/lysosome pathway and cytoskeleton are highlighted in this figure

Figure S1



A

B



C

Supplementary Figure 2:

Annotated gel images

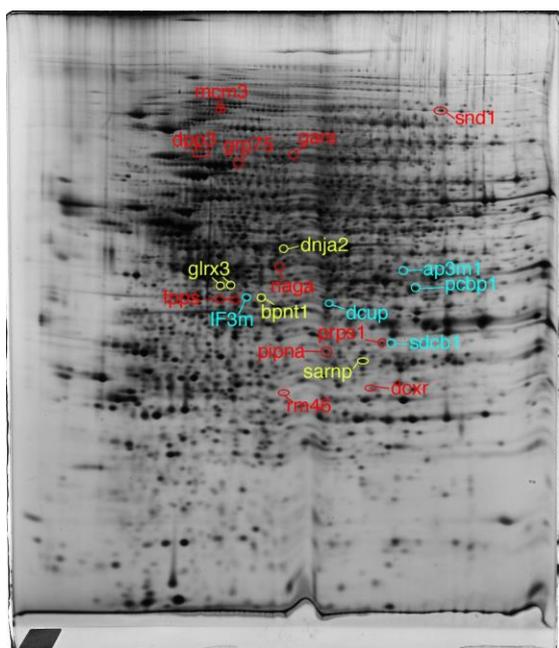
A: control, unexposed cells

B : cells exposed to pyrolytic silica for 24 hours and collected just after exposure

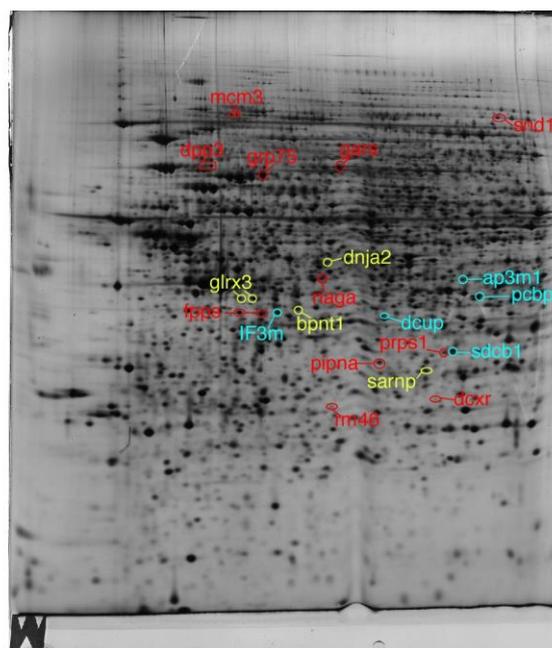
C: cells exposed to pyrolytic silica for 24 hours, and left to recover without silica for 72 hours prior to harvesting

Proteins belonging to the ubiquitin/ proteasome system, lipid metabolism, signalling, mitochondrion and protein production and folding are highlighted in this figure

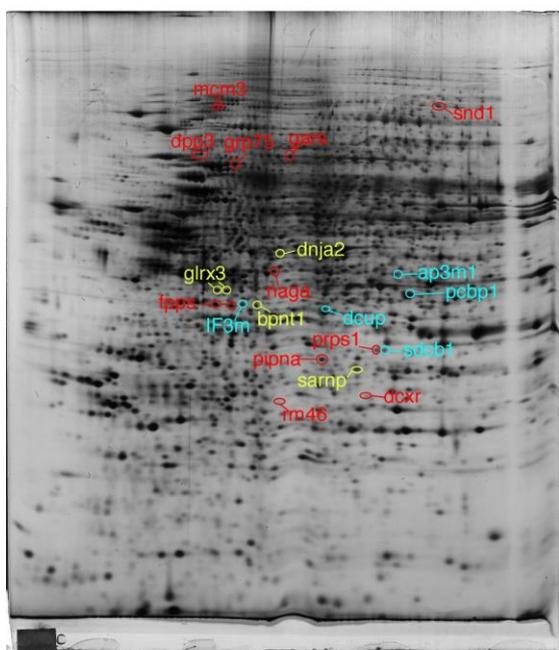
Figure S2



A



B



C

Supplementary Figure 3:

Annotated gel images

A: control, unexposed cells

B : cells exposed to pyrolytic silica for 24 hours and collected just after exposure

C:cells exposed to pyrolytic silica for 24 hours, and left to recover without silica for 72 hours prior to harvesting

Otherwise unclassified proteins are highlighted in this figure

Figure S2