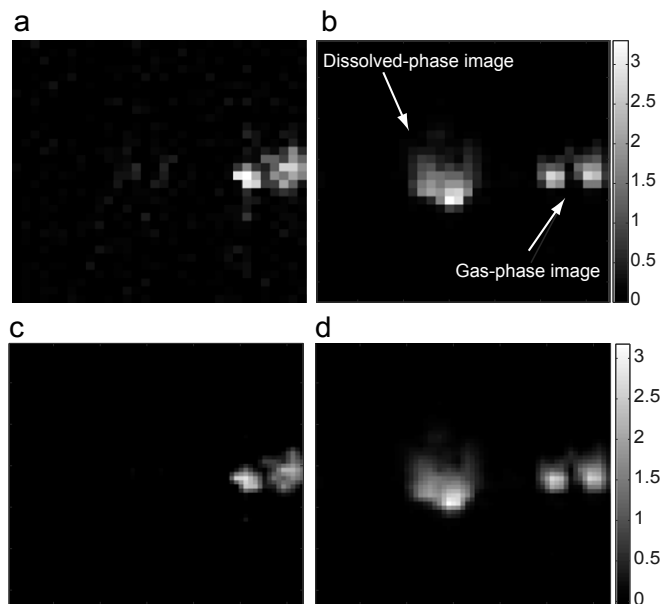


# Supporting Information

Branca et al. 10.1073/pnas.1403697111



**Fig. S1.** Gradient echo HP  $^{129}\text{Xe}$  images acquired on the same obese mouse of Fig. 3 A and C, before (A) and after (B) stimulation of thermogenesis, showing spatially separated gas-phase and dissolved-phase images. Images were then interpolated (C and D) to obtain a resolution of  $64 \times 64$  and cropped to show only the dissolved-phase image. Gas-phase and dissolved-phase images were separated by about 14 pixels by choosing a spectral width of about 14 ppm/pixel.