A High Resolution Tandem MS Imaging Method to Probe the Composition of Cellular Organelles

Gregory L. Fisher¹, Corryn E. Chini², Ben Johnson³, Michael M. Tamkun³, and Mary L. Kraft²

^{1.} Physical Electronics, Chanhassen, Minnesota, USA

University of Illinois at Urbana-Champaign, School of Chemical Sciences, Urbana, Illinois, USA
Colorado State University, Department of Biochemistry and Molecular Biology, Fort Collins, Colorado, USA

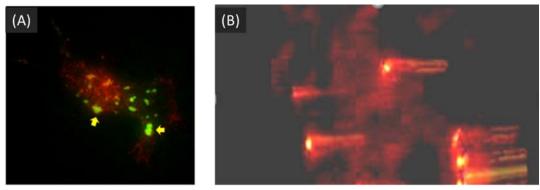


Figure 1: (A) TIRF microscopy overlay image of GFP-Kv2.1 clusters (green) and DsRed2-ER in the endoplasmic reticulum (red). Intense red patches indicate ER tubules within the illumination field. The yellow arrows indicate where the green and red fluorescence overlap at the PM adjacent to the glass substrate. (B) TOF-SIMS tandem MS image revealing the ER and the ER tubules which extend toward the PM. The displayed analysis volume is approximately $50 \ \mu m \times 30 \ \mu m \times 40 \ nm$. The image is $512 \times 512 \ pixels$ and expanded in the z-dimension, with rotation, for easy visualization of the ER tubules.

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