Supplemental Information

Technical Note

Comparison of NIMS and MALDI platforms for neuropeptide and lipid mass spectrometric imaging in *C. borealis* brain tissue

Robert M Sturm¹, Tyler Greer¹, Ruibing Chen¹, Broderick Hensen¹, Lingjun Li¹,²,*

¹Department of Chemistry, University of Wisconsin-Madison

²School of Pharmacy, University of Wisconsin-Madison

*Address reprint requests to:

Dr. Lingjun Li, School of Pharmacy & Department of Chemistry, University of Wisconsin, 777 Highland Ave, Madison, WI 53705.

E-mail: lli@pharmacy.wisc.edu. Phone: (608)265-8491, Fax: (608)262-5345.
Supplemental Figure 1:

One μM of [Arg8] Vasopressin (AVP, CYFQNCPRGa, m/z 1084.45) was deposited across the NIMS surface using “Z-touch” method prior to thaw mounting a 2 μm section of brain tissue onto the NIMS chip. Mass spectrometry imaging resulted in the AVP ion being observed only in areas where tissue was not present on the NIMS chip.
Supplemental Figure 2:

Mass spectrum of three neuropeptides using optimized MS settings. One μM of [Arg8] Vasopressin (AVP, CYFQNCPRGa, m/z 1084.45), substance-P (RPKPPQFFGGLMa, m/z 1347.73), and neurotensin (pQLYENKPRPYIL, m/z 1672.94) were applied to the NIMS surface for 1 min using the “Z-touch” method (0.5 μL).