

## **Analytical and Bioanalytical Chemistry**

### **Electronic Supplementary Material**

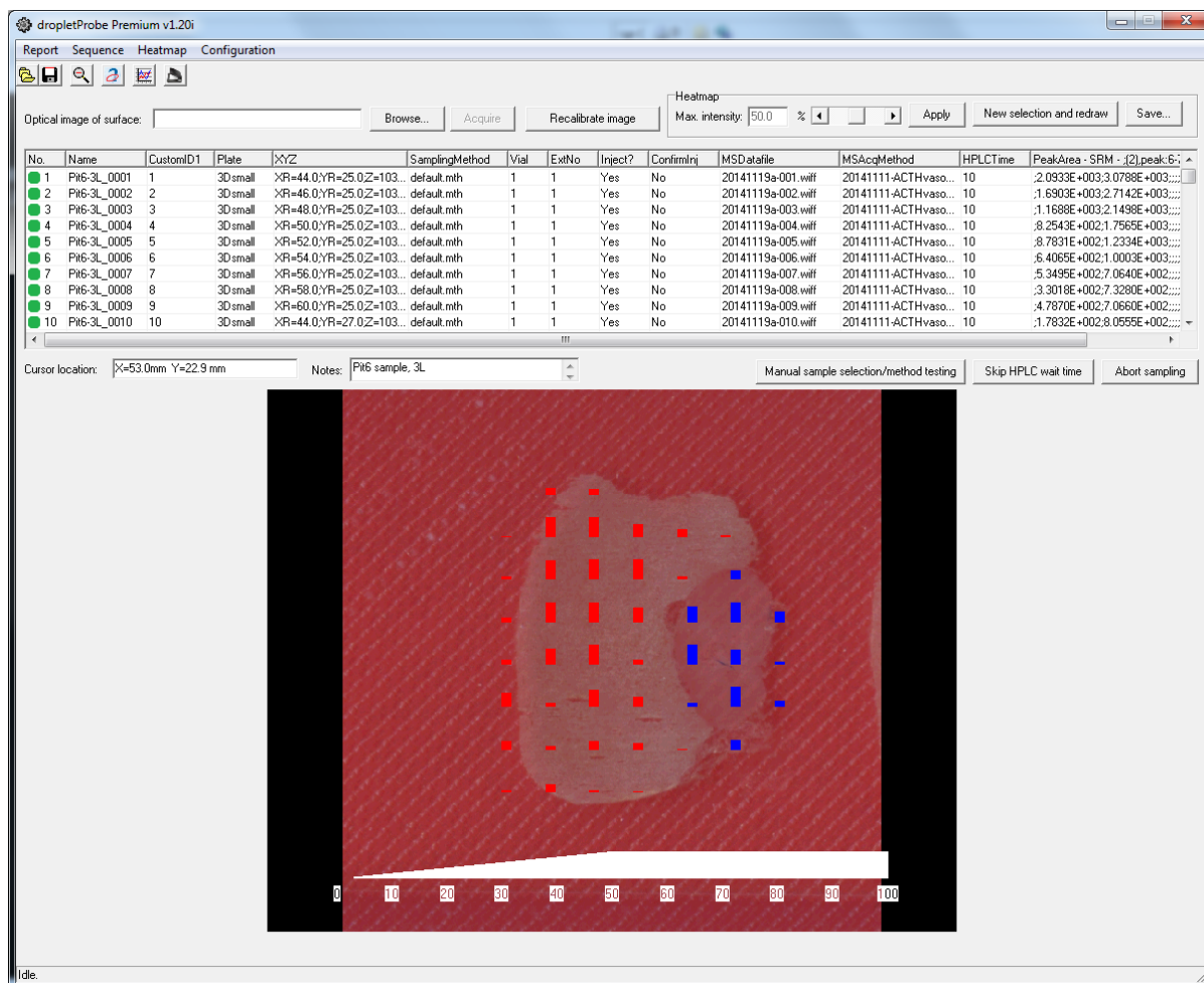
#### **Profiling of adrenocorticotrophic hormone and arginine vasopressin in human pituitary gland and tumor thin tissue sections using droplet-based liquid microjunction surface sampling-HPLC-ESI-MS/MS**

Vilmos Kertesz, David Calligaris, Daniel R. Feldman, Armen Changelian, Edward R. Laws, Sandro Santagata, Nathalie Y.R. Agar, Gary J. Van Berkel

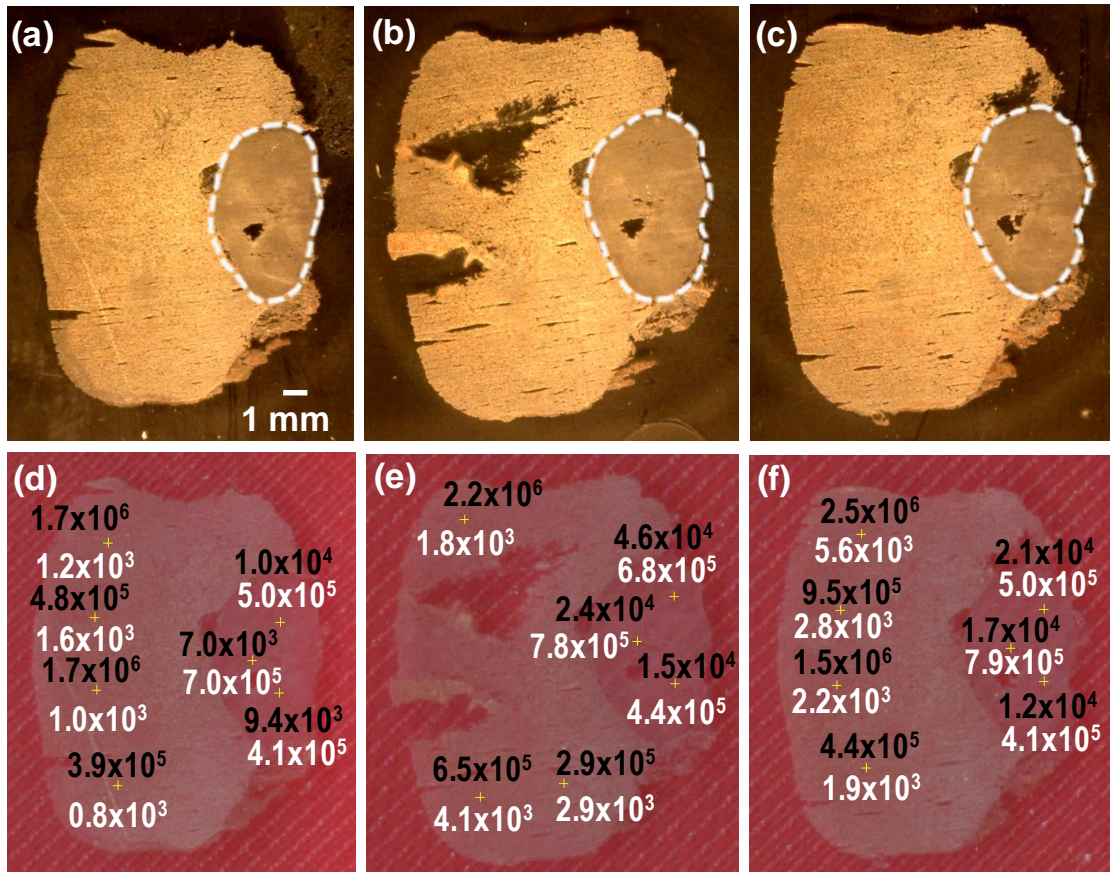
Supplementary Video - 216\_2015\_8803\_MOESM2\_ESM.mpg

	AVP	ACTH
<b>Pit6 AH</b>	$2.34 \pm 1.44 \times 10^3$	$1.17 \pm 0.80 \times 10^6$
<b>Pit6 NH</b>	$5.80 \pm 1.58 \times 10^5$	$1.78 \pm 1.19 \times 10^4$
<b>A3 Tumor</b>	$3.91 \pm 2.29 \times 10^4$	$2.04 \pm 0.86 \times 10^5$
<b>A3 Normal</b>	$4.76 \pm 0.72 \times 10^5$	$4.39 \pm 0.31 \times 10^4$
<b>A4</b>	$3.91 \pm 1.33 \times 10^2$	$4.14 \pm 1.38 \times 10^5$
<b>A5</b>	$2.58 \pm 1.05 \times 10^3$	$1.29 \pm 0.71 \times 10^4$
<b>N1</b>	$1.84 \pm 0.95 \times 10^3$	$3.36 \pm 1.32 \times 10^3$
<b>Blank</b>	$1.04 \pm 0.87 \times 10^3$	$1.62 \pm 1.50 \times 10^3$

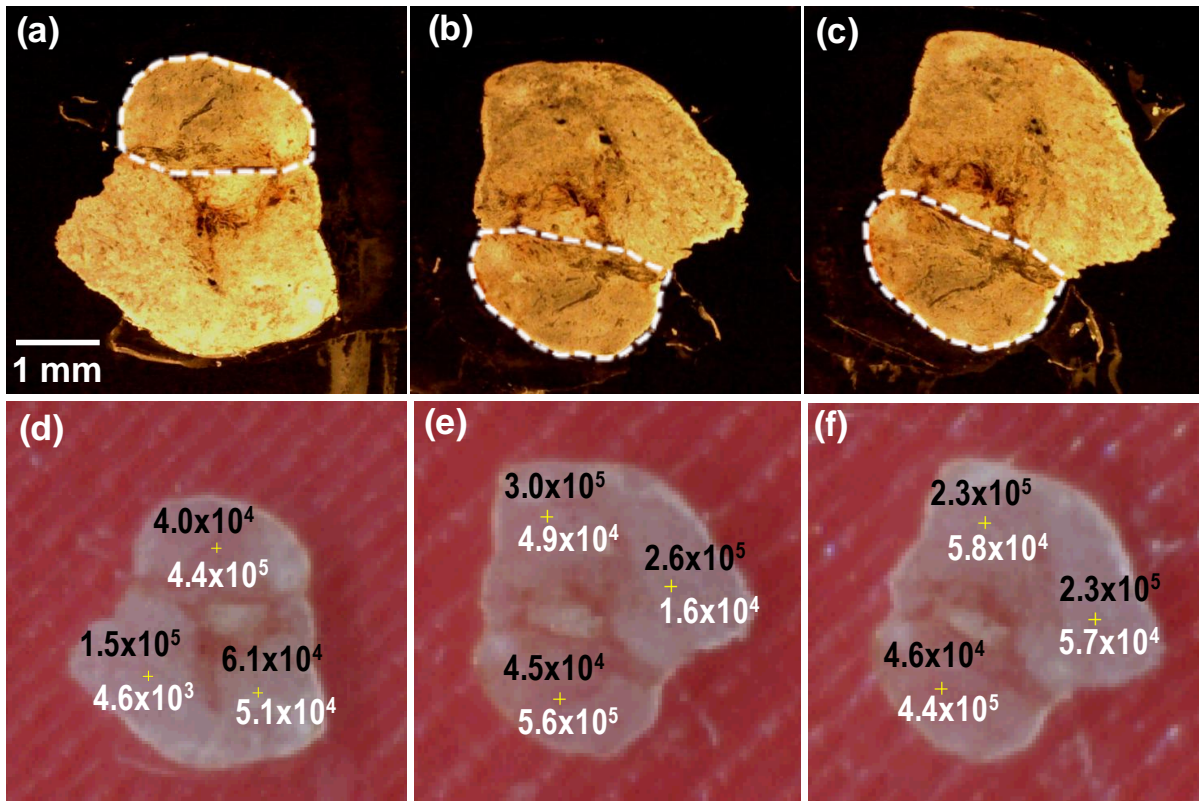
**Table S1** Averaged integrated MRM peak areas and standard deviation obtained for AVP and ACTH from the different tissue samples. These values are plot in Figure 3 of the main text



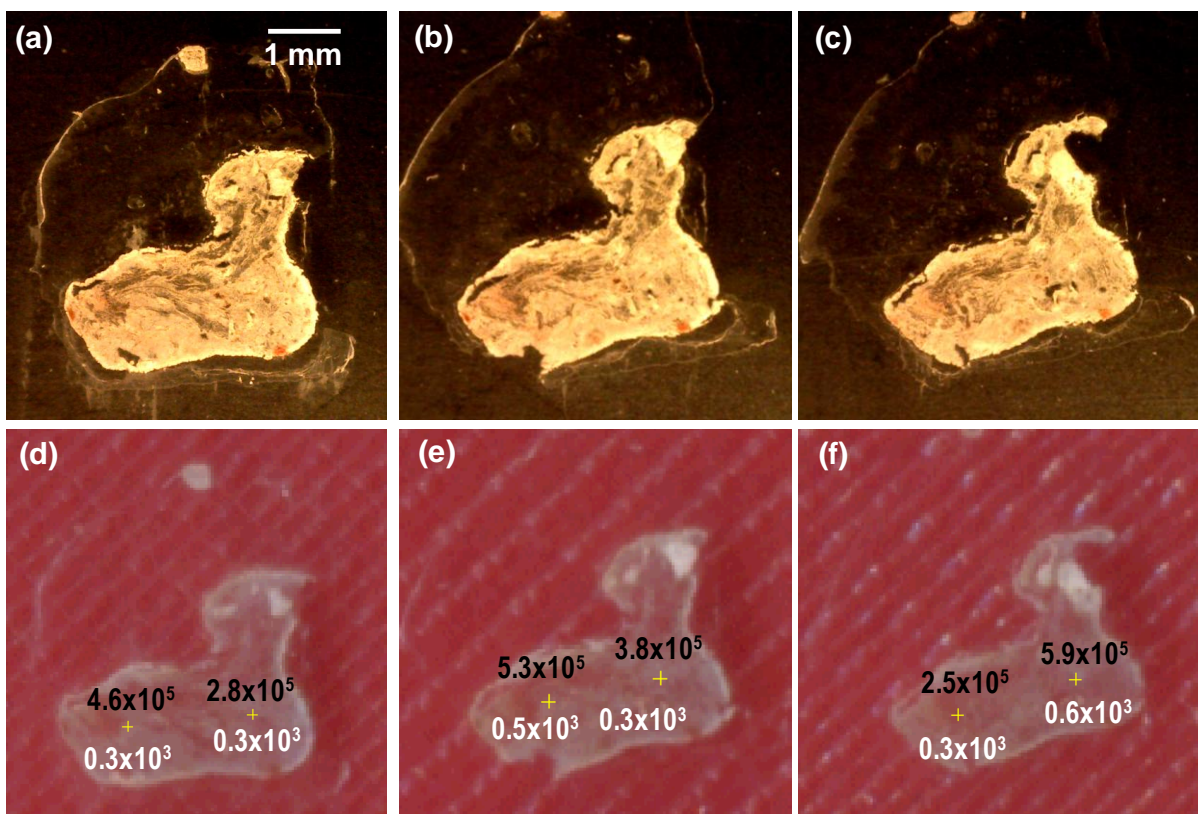
**Fig. S1** Screenshot of the main screen of software dropletProbe Premium<sup>®</sup> showing the sample list with experimental parameters (top section) and the heatmap of two proteins overlaid on the optical image of a thin tissue section of a human pituitary gland section (red: ACTH, blue: AVP; bottom section)



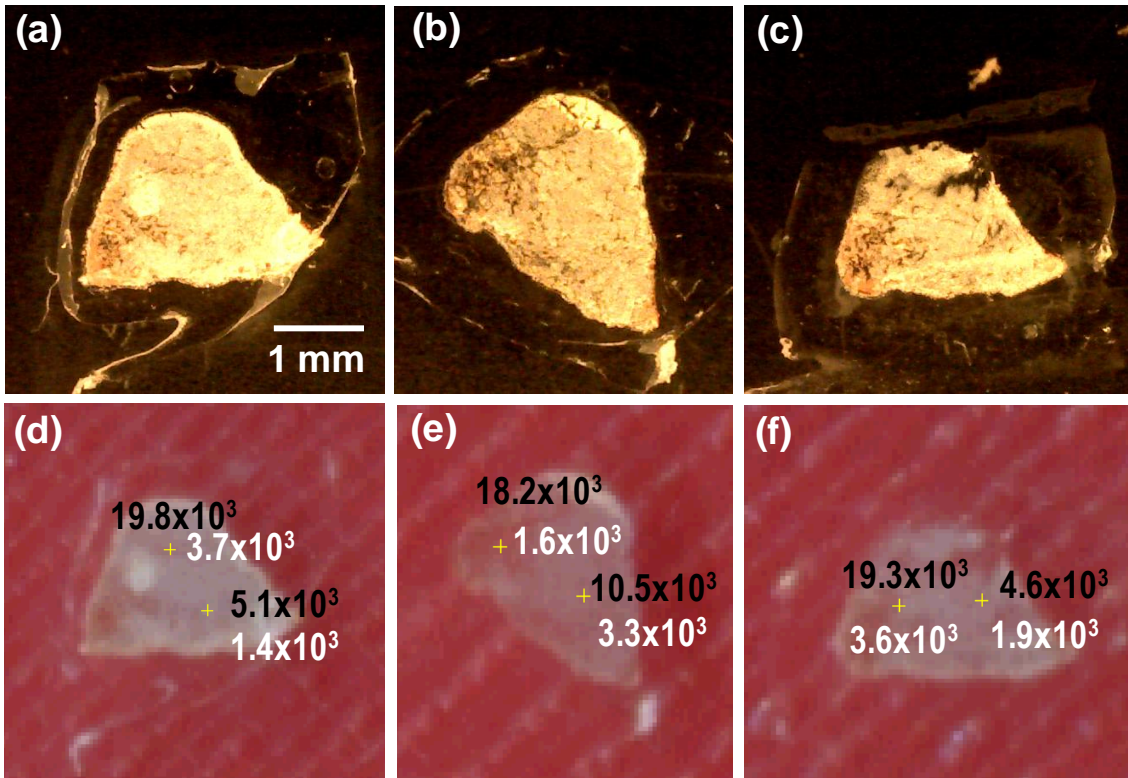
**Fig. S2** (a,b,c) Optical images of three thin tissue sections coded Pit6 on glass taken pre-analysis with scale bar shown in (a) and with NH region of the pituitary gland indicated by dashed white lines in (a)-(c). (d,e,f) Corresponding optical images showing the sampled surface locations (yellow plus signs) and integrated peak areas in counts for cpds 1 (white lettering) and 2 (black lettering)



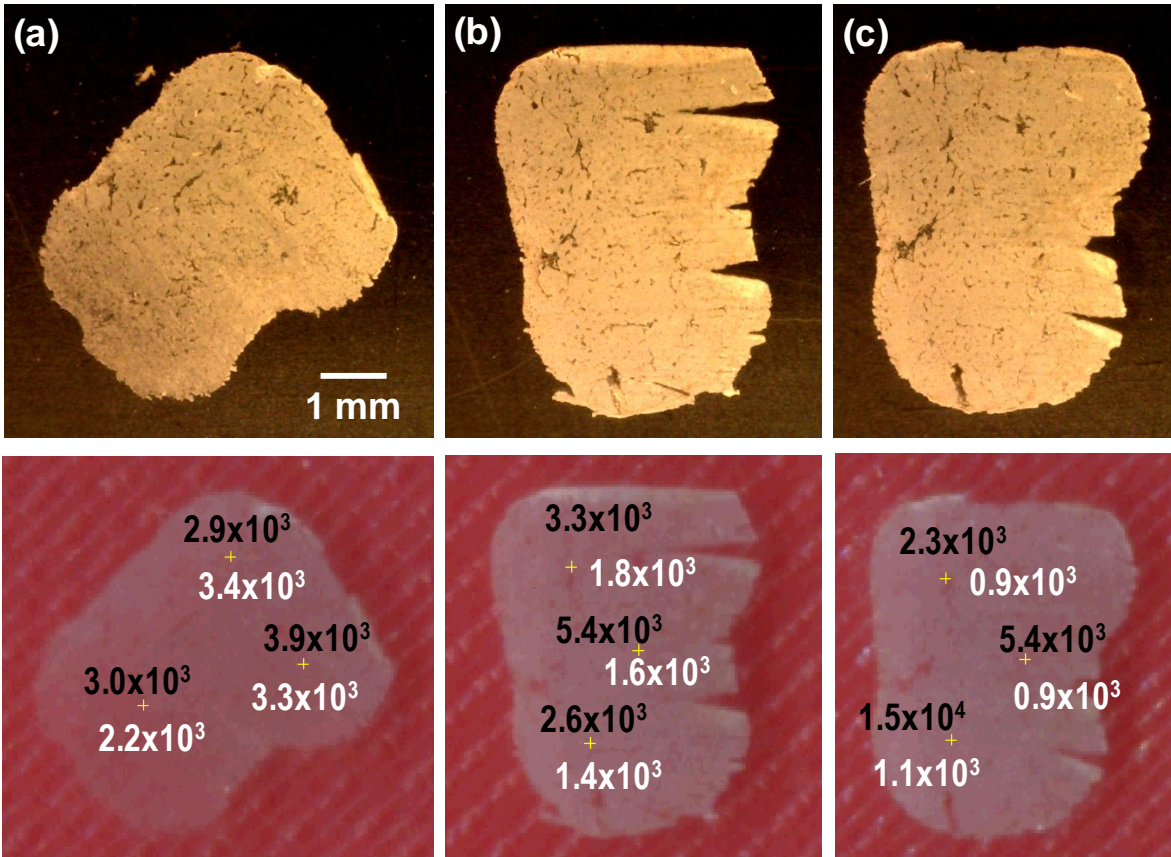
**Fig. S3** (a,b,c) Optical images of three thin tissue sections coded A3 on glass taken pre-analysis with scale bar shown in (a) and with normal pituitary NH region indicated by dashed white lines in (a)-(c). (d,e,f) Corresponding optical images showing the sampled surface locations (yellow plus signs) and integrated peak areas in counts for cpds 1 (white lettering) and 2 (black lettering)



**Fig. S4** (a,b,c) Optical images of three thin tissue sections coded A4 on glass taken pre-analysis with scale bar shown in (a). (d,e,f) Corresponding optical images showing the sampled surface locations (yellow plus signs) and integrated peak areas in counts for cpds 1 (white lettering) and 2 (black lettering)



**Fig. S5** (a,b,c) Optical images of three thin tissue sections coded A5 on glass taken pre-analysis with scale bar shown in (a). (d,e,f) Corresponding optical images showing the sampled surface locations (yellow plus signs) and integrated peak areas in counts for cpds 1 (white lettering) and 2 (black lettering)



**Fig. S6** (a,b,c) Optical images of three thin tissue sections coded N1 on glass taken pre-analysis with scale bar shown in (a). (d,e,f) Corresponding optical images showing the sampled surface locations (yellow plus signs) and integrated peak areas in counts for cpds 1 (white lettering) and 2 (black lettering)