



SUPPLEMENTARY MATERIAL TO
**LC/DAD determination of biogenic amines in serum of patients
with diabetes mellitus, chronic urticaria or Hashimoto's
thyroiditis**

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TABLE S I. Regression equations for the examined biogenic amines

Analyte	Regression equation	R^a	$SD \times 10^{3b}$
Putrescine	$y = 3.2852 + 4.2021x$	0.9995	2.21
Histamine	$y = -0.8276 + 87.7015x$	0.9999	5.16
Spermidine	$y = -1.7943 + 24.9433x$	1.0000	1.27
Epinephrine	$y = -0.5345 + 51.4255x$	0.9999	3.24
Norepinephrine	$y = -0.7204 + 21.0998x$	0.9999	1.27

^aCorrelation coefficient; ^bstandard deviation of the correlation coefficient

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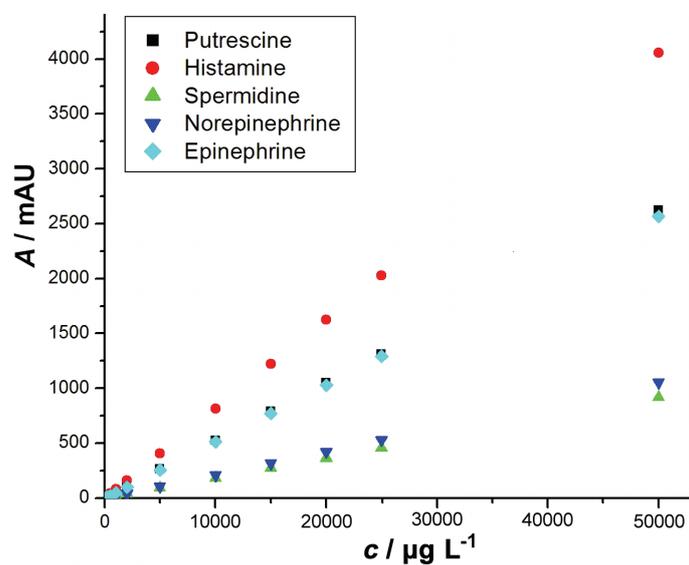


Fig. S-1. Calibration curves for putrescine, histamine, spermidine, epinephrine and norepinephrine.

TABLE S-II. Precision and accuracy of the method

Analyte	Intra-day ($n = 6$)		Inter-day ($n = 2$)	
	Accuracy %	Precision $RDS / \%$	Accuracy %	Precision $RDS / \%$
Putrescine	96.32	1.35	95.12	6.80
	97.62	1.39	96.53	4.30
	97.01	2.41	97.33	4.01
Histamine	98.28	2.75	98.03	4.55
	99.01	1.40	98.62	3.60
	98.78	2.45	98.34	4.58
Spermidine	97.14	3.20	98.07	2.76
	97.57	2.75	98.78	3.01
	98.01	2.99	97.74	2.91
Epinephrine	99.75	1.27	98.25	2.55
	98.95	1.44	98.75	2.86
	99.05	0.78	97.45	2.51
Norepinephrine	96.01	8.46	97.12	3.98
	97.25	5.01	96.74	4.07
	96.54	4.76	97.01	4.55

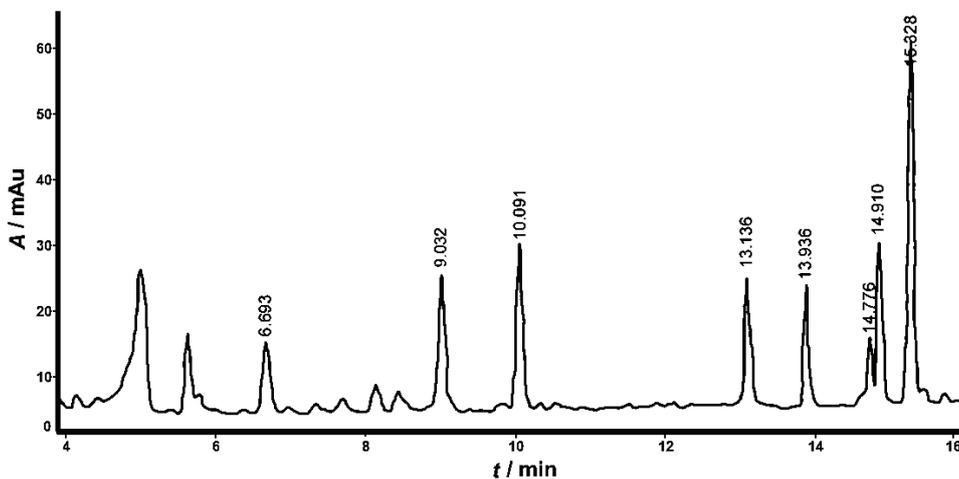


Fig. S-2. Chromatogram of healthy control serum spiked with putrescine and histamine concentration of 2000 ng L⁻¹, spermidine 6000 ng L⁻¹, epinephrine 1000 ng L⁻¹ and norepinephrine 5000 ng L⁻¹.

TABLE S-III. Recovery values for the biogenic amines

Analyte	Added, ng L ⁻¹	Found \pm <i>SD</i> ^a , ng L ⁻¹	Recovery, %	<i>RSD</i> ^b / %
Putrescine	1000	980 \pm 28	98.0	2.75
	1500	1450 \pm 38	96.7	3.01
	2000	1900 \pm 44	98.8	3.46
Histamine	1000	1100 \pm 20	110.0	3.85
	1500	1600 \pm 28	106.7	4.16
	2000	2400 \pm 35	100.1	3.12
Spermidine	2000	2100 \pm 30	105.0	2.80
	4000	4200 \pm 48	105.0	2.88
	6000	6400 \pm 57	103.9	2.79
Epinephrine	350	300 \pm 15	85.7	2.80
	700	630 \pm 27	90.0	3.25
	1000	900 \pm 29	90.0	3.18
Norepinephrine	1500	1400 \pm 26	93.3	3.05
	3000	2800 \pm 51	93.3	3.15
	5000	4600 \pm 70	92.0	2.76

^aStandard deviation of five replicate determinations; ^brelative standard deviation