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Supplementary Material

Analysis of essential, toxic, rare earth, and noble elements in maternal and umbilical cord blood

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Table S1a. Recovery (R) values for all of the examined trace elements obtained with CRMs by ICP-MS.

Element	Internal standard	Serum Level-1		R(%)	Serum Level-2		R(%)
		Measured	Declared		Measured	Declared	
Al (µg/L)	Sc	33.5	33.6	99.7	109	111	98.2
Mn (µg/L)	In	14.6	15	97.3	18.9	19.1	99.0
Co (µg/L)	Ge	1.18	1.2	98.3	3.3	3.2	103.1
Ni (µg/L)	In	5.86	5.8	101	11	10.7	102.8
Cu (µg/L)	In	1689	1691	99.9	2592	2600	99.6
Zn (µg/L)	In	1721	1738	99.0	912	920	99.1
As (µg/L)	Ge	0.48	0.47	102.1	1.18	< 1	118
Se (µg/L)	In	105	107	98.1	137	136	100.7
Rb (µg/L)	In	5.12	5.25	97.5	7.15	7.2	99.3
Sr (µg/L)	In	25.6	26.3	97.3	126	130	96.9
Mo (µg/L)	Ge	0.69	0.7	98.6	1.29	1.31	98.5
Cd (µg/L)	Ge	0.124	0.126	98.4	0.315	0.317	99.4
Sb (µg/L)	Ge	64.3	80	80.4	19	21	90.5
Ce (µg/L)	In	0.0375	0.0387	96.9	0.281	0.285	98.6
Nd (µg/L)	In	0.0221	0.0228	96.9	0.250	0.249	100.4
Pb (µg/L)	In	1.01	1.02	99.0	3.02	3	100.7
U (µg/L)	In	0.046	0.048	95.8	0.97	0.98	99.0

Table S1b. The standard addition recovery (R) experiment for selected trace elements in maternal and UC plasma samples.

Element	Internal standard	R(%)	
Be	Sc	98.5*	99.2**
Ru	In	99.0*	99.4**
Rh	In	98.8*	99.1**
La	In	97.5*	99.4**
Pr	In	98.8*	97.4**
Sm	In	99.7*	98.9**
Eu	In	98.8*	99.3**
Gd	In	100.9*	101.1**
Dy	In	99.4*	98.6**
Ho	In	99.6*	98.5**
Er	In	101.1*	100.3**
Re	In	98.7*	99.4**
Pt	In	100.3*	101.2**

*spiked with 10 µg/L; ** spiked with 20 µg/L.