

**Table S2.** Results of biotin concentration detection

Assays	Levels	Biotin concentration (ng/mL)		
		0 ng/mL biotin added	5,000 ng/mL biotin added	10,000 ng/mL biotin added
$\beta$ -hCG (IU/L)	Level-1	0.35	489	915
	Level-2	0.18	471	931
	Level-3	0.22	457	908
Prog (nmol/L)	Level-1	0.32	466	926
	Level-2	0.32	466	966
	Level-3	0.42	480	895

The concentration of  $\beta$ -hCG levels 1–3 are 42.62, 499.4, and 8,566 IU/L. The concentration of Prog levels 1–3 are 3.55, 54.05, and 157.5 nmol/L.