

Supporting Information

Effective SERS method for identification of Dexmedetomidine Hydrochloride in biological samples

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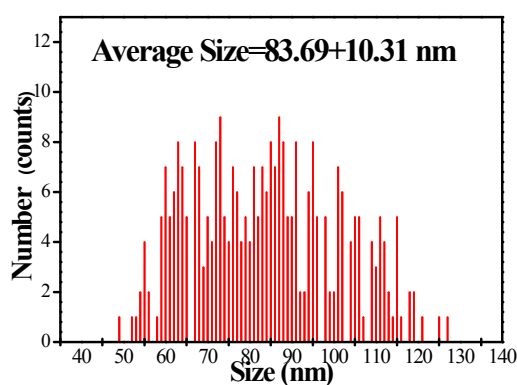


Figure S1 The histogram of particle size distribution of Ag nanoparticles.

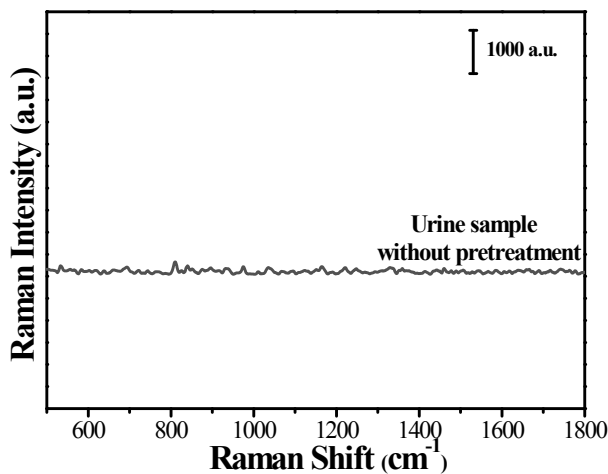


Figure S2 SERS spectrum of DH in urine without any pretreatment.

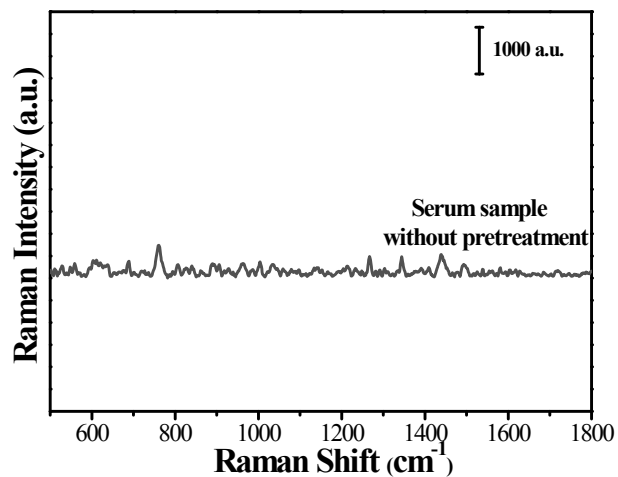


Figure S3 SERS spectrum of DH in serum without any pretreatment.

Table S1 The sensitivity comparison of different methods for the detection of DH molecule.

Methods	Sensitivity
High performance Liquid Chromatography (HPLC)	0.004 $\mu\text{g/mL}$ (aqueous solution)
Gas Chromatography-Mass Spectrometer (GC-MS)	0.0028 $\mu\text{g/mL}$ (aqueous solution)
SERS	1 $\mu\text{g/mL}$ (aqueous solution) 10 $\mu\text{g/mL}$ (urine) 12 $\mu\text{g/mL}$ (serum)