

Support Information

Colorimetric Kit for Rapid Porcine Circovirus 2 (PCV-2) Diagnosis

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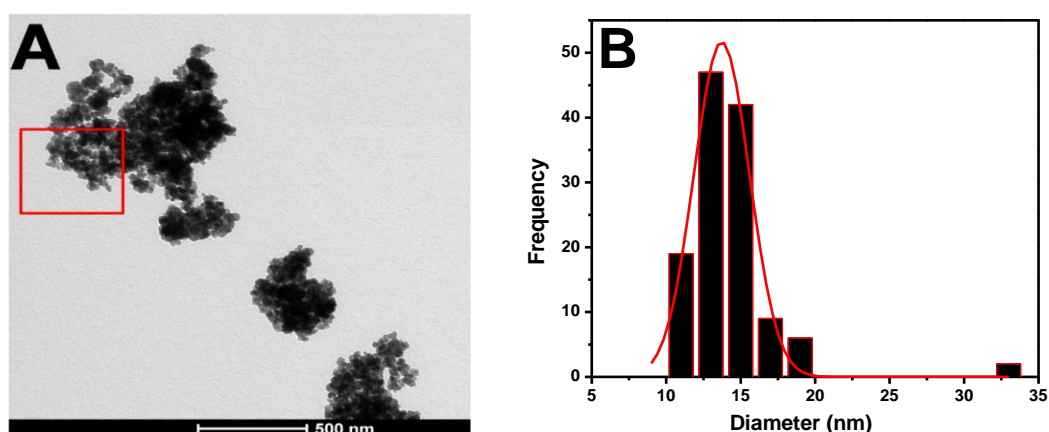


Figure S1. Surface active maghemite nanoparticles' (SAMN) featuring. **(A)** Transmission electron microscopy (TEM) image; and **(B)** histogram showing mean nanoparticle diameter of 13.72 nm.

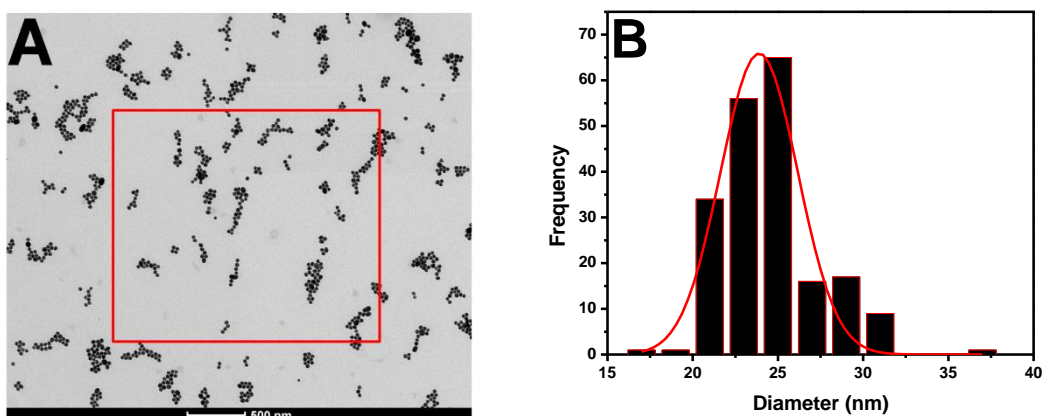


Figure S2. Gold nanoparticles' (AuNPs) featuring. **(A)** Transmission electron microscopy image; and **(B)** histogram showing mean nanoparticle diameter.

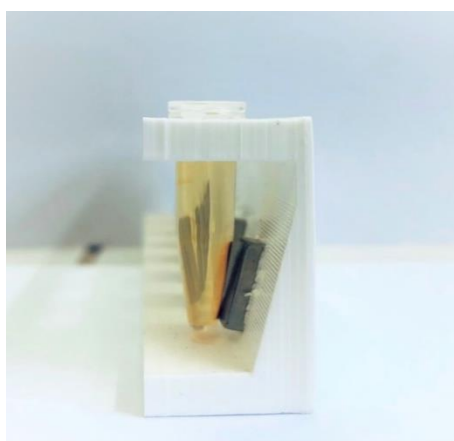
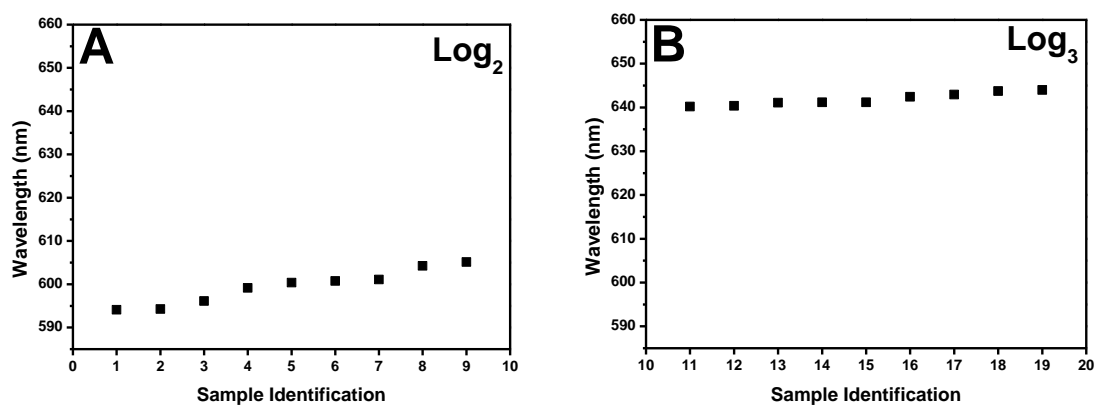


Figure S3. SAMN retrieved from water suspension upon exposure to external magnet.



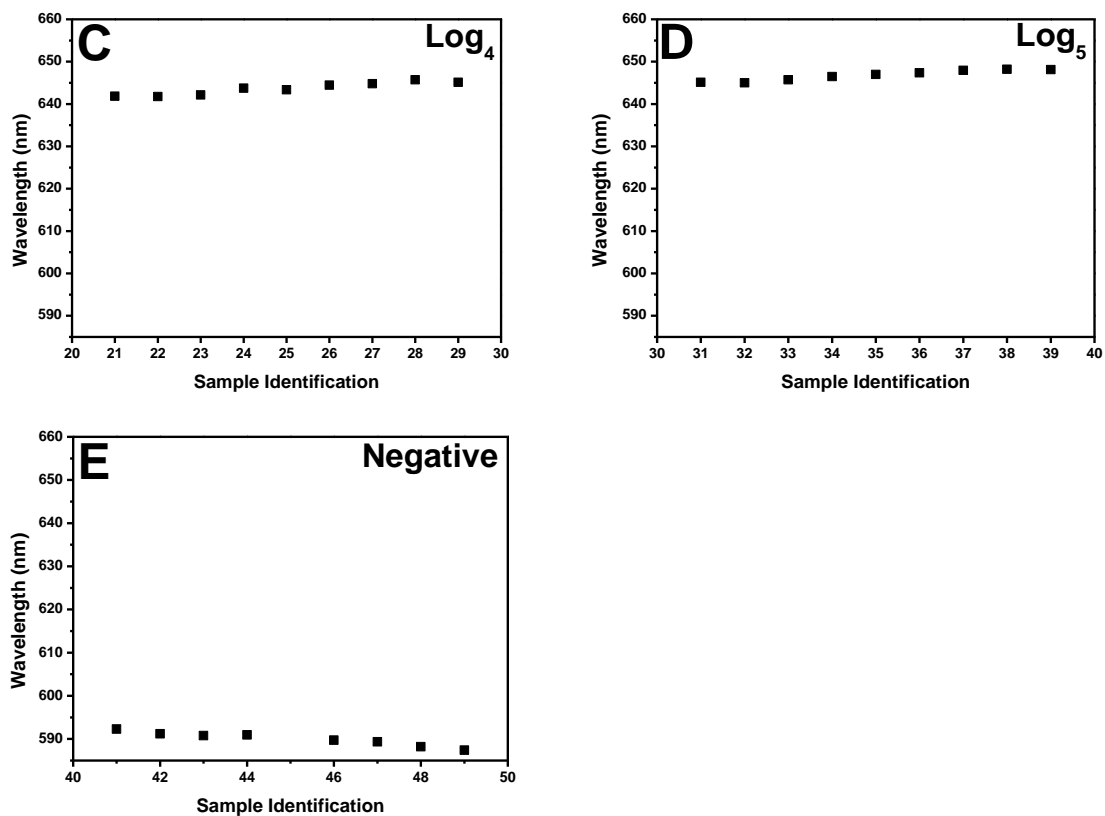


Figure S4: Spectrophotometer graphs showing the wavelengths of different viral load of samples tested. (A) samples with viral load of log₂, (B) samples with viral load of log₃, (C) samples with viral load of log₄, (D) samples with viral load of log₅ and (E) negative samples.

Table S1: pH values for positive samples.

Sample Identification	Log ₁₀ (copies/μL)	pH
SO10754	2.41	5.1
SO10765	2.62	5.0
SO11948	2.71	5.5
SO12166	2.63	5.0
SO12178	2.01	5.0
SO12669	2.57	5.0
SO12670	2.87	5.4
SO2G3	2.39	5.5
SO3G3	2.41	5.5
SO6G3	2.97	5.4
SO8783	3.02	5.5
SO8786	3.71	5.0
SO8791	3.42	5.0
SO8808	3.62	5.7

SO10767	3.56	5.5
SO10768	3.02	5.3
SO10774	3.72	5.1
SO10779	3.84	5.0
SO10782	3.20	5.0
SO 12659	3.15	5.0
SO8777	4.18	5.1
SO8797	4.41	5.0
SO8798	4.68	5.7
SO8803	4.49	5.5
SO8810	4.82	5.5
SO8819	4.00	5.5
SO8823	4.73	5.1
SO11974	4.94	5.7
SO5G1	4.80	5.5
SO7G1	4.19	5.5
SO8787	5.91	5.5
SO8790	5.27	5.2
SO8788	5.38	5.0
SO8799	5.10	5.0
SO8800	5.17	5.0
SO8802	5.57	5.5
SO8820	5.05	5.5
SO8795	5.95	5.7
SO12468	5.09	5.0
SO12479	5.05	5.0

Table S2: pH values for negative samples.

Samples Identification	Log₁₀ (copies/μL)	pH
SO12671	0	5.0
SO12673	0	5.0
SO12674	0	5.0
SO12680	0	5.5
SO12681	0	5.0
SO12683	0	5.0
SO12686	0	5.5
SO12687	0	5.5
SO12688	0	5.5
SO12689	0	5.3