

Supporting Information for

Evaluation of Biosynthesis Parameters, Stability and Biological Activities for Silver Nanoparticles Synthesized by *Cornus Officinalis* Extract under 365 nm UV Radiation

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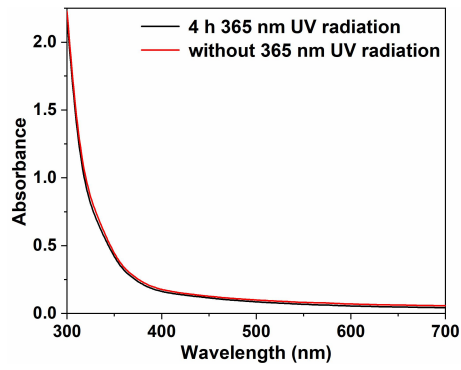


Figure S1 The UV-Vis spectra of *Cornus Officinalis* Extract before and after 4 h 365 UV radiation

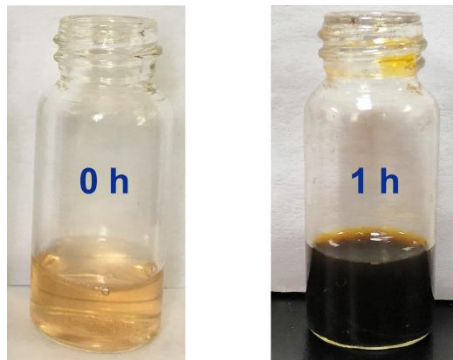


Figure S2 The photograph of the mixture of *Cornus officinalis* aqueous extract and AgNO_3 after the 365 nm UV radiation 0 h and 1 h

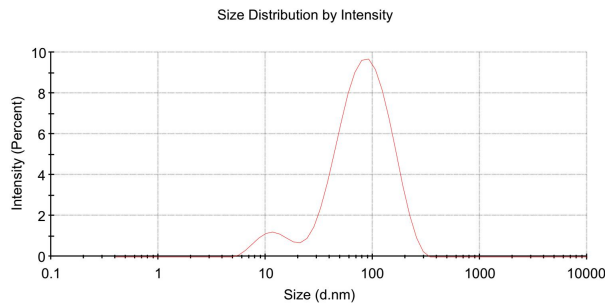


Figure S3 The size of synthesized AgNPs after 30 days

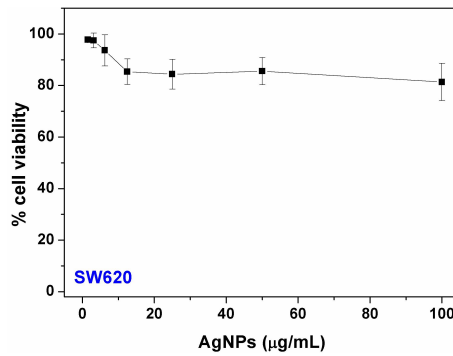


Figure S4 Inhibition effects of biosynthesized AgNPs against SW620 cell line

Table S1 The average size for synthesized AgNPs at different pH

pH	3.0	4.0	5.0	6.0	7.0
Size (nm)	116.9±1.7	109.3±1.7	100.2±1.3	82.6±1.3	67.5±0.7

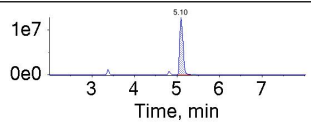
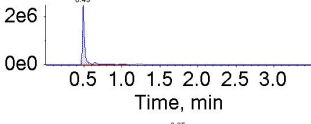
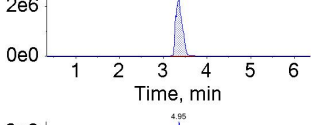
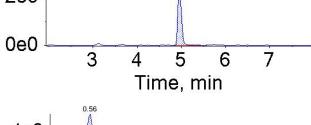
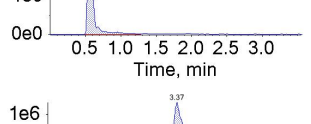
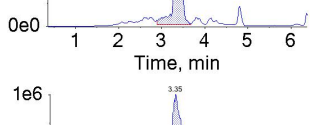
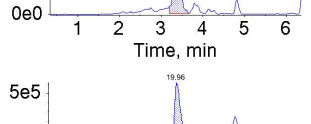
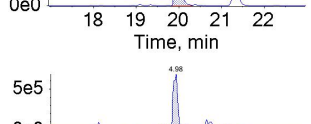
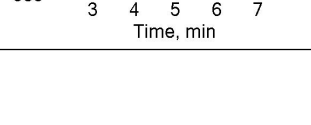
Table S2 The average size for synthesized AgNPs at different material proportion

ratio	1:1	1:2	1:3	1:5	1:10
Size (nm)	67.5±0.7	108.3±0.8	112.4±1.8	110.7±1.7	82.3±1.9

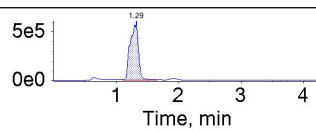
Table S3 The average size for synthesized AgNPs at different reaction times

Times	0.2 h	0.5 h	1 h	2 h	3 h	4 h	5 h
Size (nm)	66.5±0.9	68.9±0.7	67.5±0.7	67.9±0.4	67.4±0.8	66.3±0.3	64.2±0.8

Table S4 Potential bioactive components in *Cornus Officinalis* Extract (top 10)

Compound	MW(g/mol)	LC/MS Chromatogram
Loganin +HCOOH	435.1408 - 435.1608	
Quinic acid	191.0461 - 191.0661	
8-O-Acetylharpagide +NH ₃	424.1713 - 424.1913	
Cantharidin	197.0708 - 197.0908	
Malic acid	133.0043 - 133.0243	
Genipin	227.0814 - 227.1014	
Geniposide	389.1342 - 389.1542	
Asiatic acid	487.3329 - 487.3529	
2-Methoxycinnamic acid	179.0603 - 179.0803	

5-Hydroxymethylfurfural 127.0290 - 127.0490



Triptonide 359.1389 - 359.1589

