

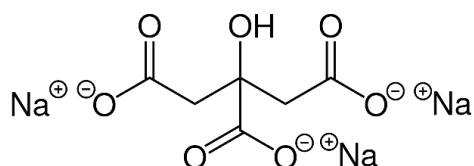


NANOBRAND

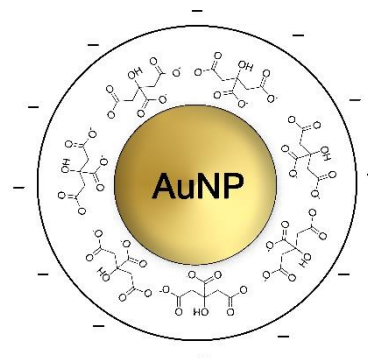
NB-GSP-20-CIT-1

20nm Gold Nano-Spheres, citrate-coated

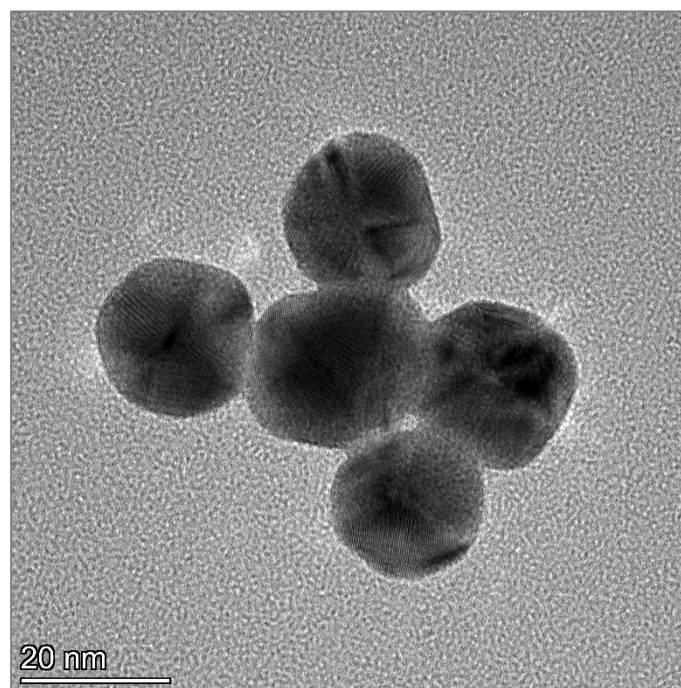
Sodium Citrate
CAS 68-04-2



Gold nanoparticles coated with citrate



Diameter (TEM):	20.09 ± 0.43nm
Coefficient of polydispersity:	2.13 %
Optical density (OD):	1
Mass of single particle:	8.194E-14 mg
Surface of single particle:	1267.98 nm ²
Volume of single particle:	4245.60 nm ³
Particles concentration:	5.960E+11 particles/mL
Molar particles concentration:	0.99 nM
Surface area (TEM):	15.47 m ² /g
Surface to volume ratio:	0.299 nm ⁻¹
Mass of gold:	48.80 µg/ml
Hydrodynamic diameter (DLS):	25.52nm
Zeta-potential:	-27.4 mV
pH of the solution:	5.5 – 6.5
Particle surface:	Sodium Citrate
Solvent:	Milli-Q water (18.1 MΩ-cm)



Instrumentation used for characterization

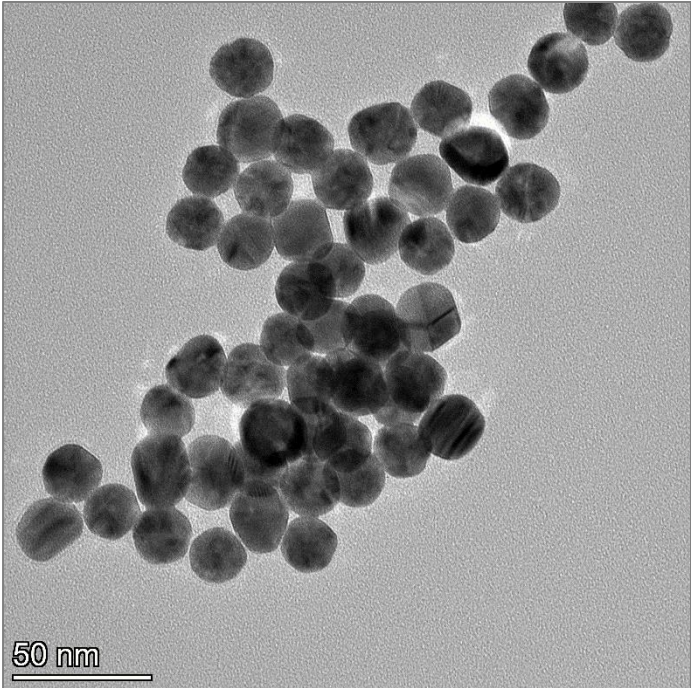
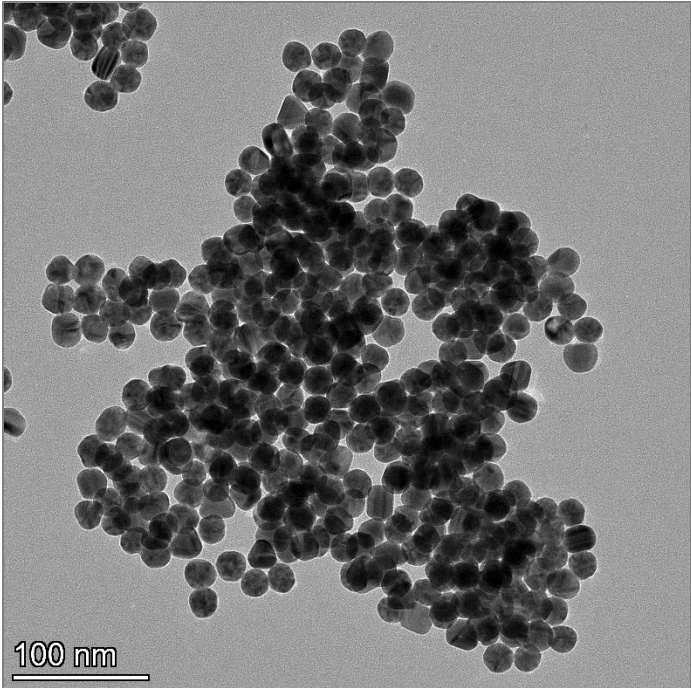
Diameter and size distribution:	Transmission Electron Microscope Thermo Scientific TALOS F200X
Mass concentration:	PerkinElmer NexION 2000P+ ICP-MS
Spectral properties:	PerkinElmer Lambda 365+ UV-Visible Spectrophotometer
Hydrodynamic Diameter and Zeta Potential:	Malvern Zetasizer

Shake before use. Store at 4-25°C away from light. DO NOT FREEZE

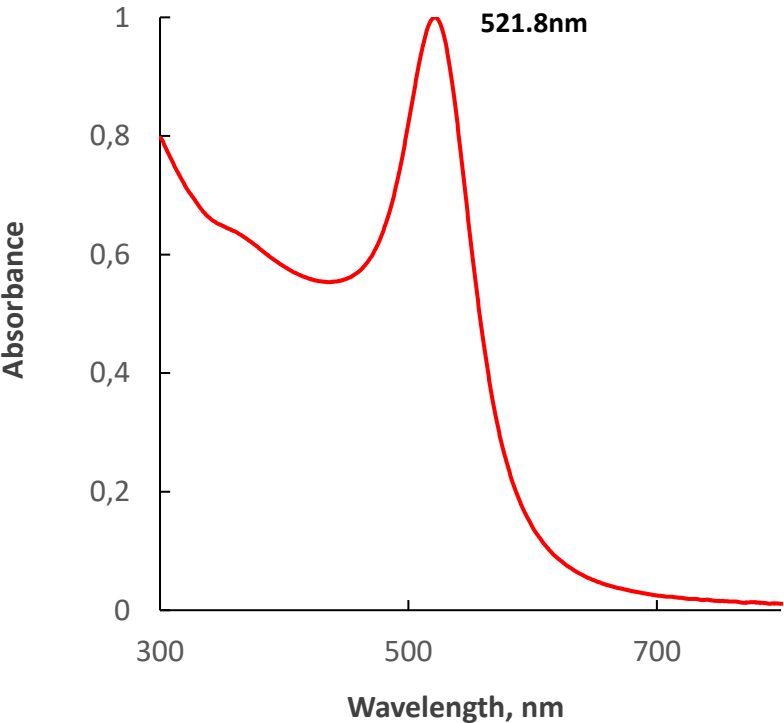


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20nm Gold Nano-Spheres, citrate-coated



Optical Properties



Size Distribution

