

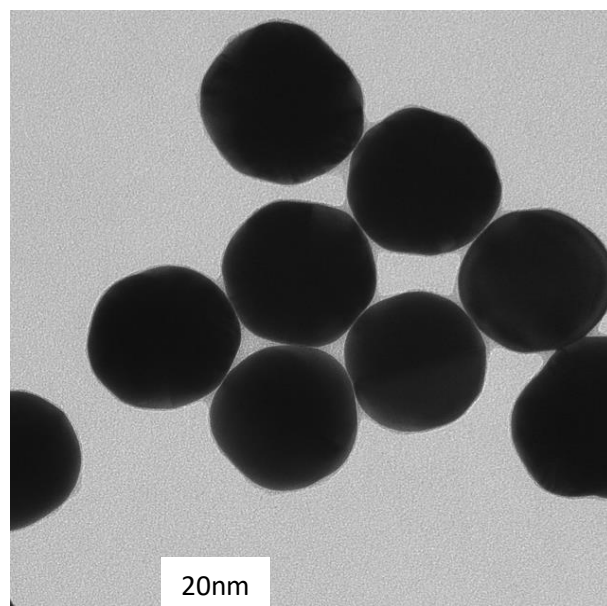
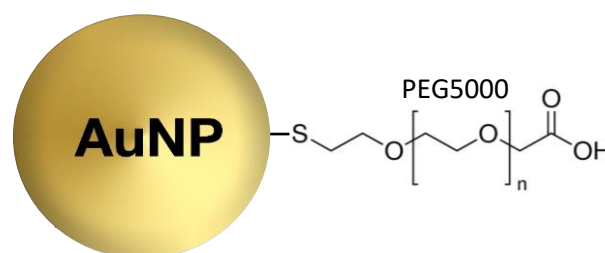


NB-GSPLF-80-5CARB-50

“Lateral-Flow-Easy” 80nm Gold Nano-Spheres PEG-5K-COOH surface, OD=50

Surface coating: Poly (ethylene glycol) 2-mercaptoethyl ether acetic acid
PEG average M_n 5000 ($n \approx 110$)
Syn.: Thiol-PEG-carboxylate, Thio-PEG-COOH

Parameter	Value	Specification
Diameter (TEM):	79.78 ± 0.89 nm	76 – 84 nm
Coefficient of polydispersity:	1.12%	<15%
Optical density (OD):	50.0	49.5 – 50.5
Mass of single particle:	5.131×10^{-12} mg	As reported
Surface of single particle:	2.000×10^4 nm ²	As reported
Volume of single particle:	2.659×10^5 nm ³	As reported
Particles concentration:	3.62×10^{11} particles/ml	As reported
Molar particles concentration:	0.604 nM	As reported
Surface area (TEM):	3.90 m ² /g	As reported
Surface to volume ratio:	0.075 nm ⁻¹	As reported
Mass of gold:	1859.2 µg/ml	As reported
Hydrodynamic diameter (DLS):	112.2 nm	100 - 120 nm
PdI (DLS):	0.025	<0.150
Zeta-potential:	-55.0 mV	<-35 mV
pH of the solution:	6.2	5.5 – 6.5
Particle surface:	PEG5000-carboxyl	PEG5000-carboxyl
Solvent:	Milli-Q water (18.1 MΩ-cm)	Milli-Q water (18.1 MΩ-cm)



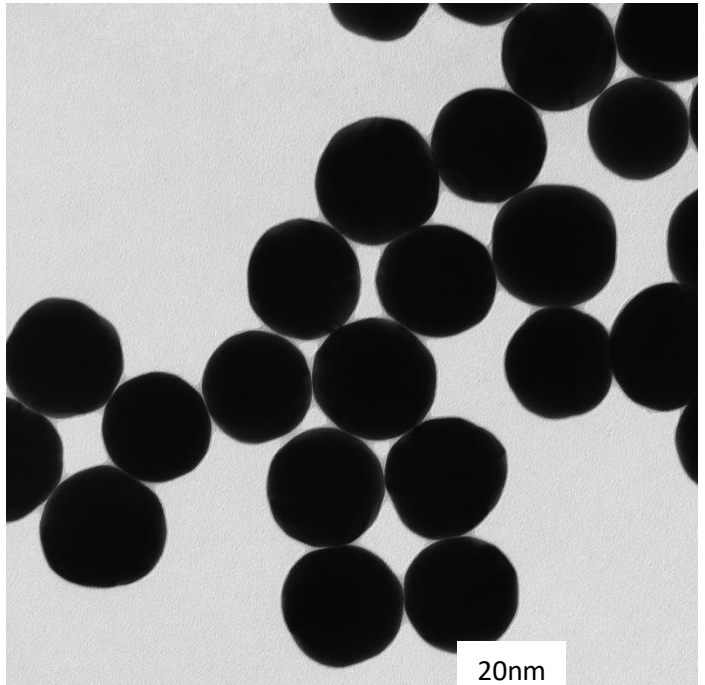
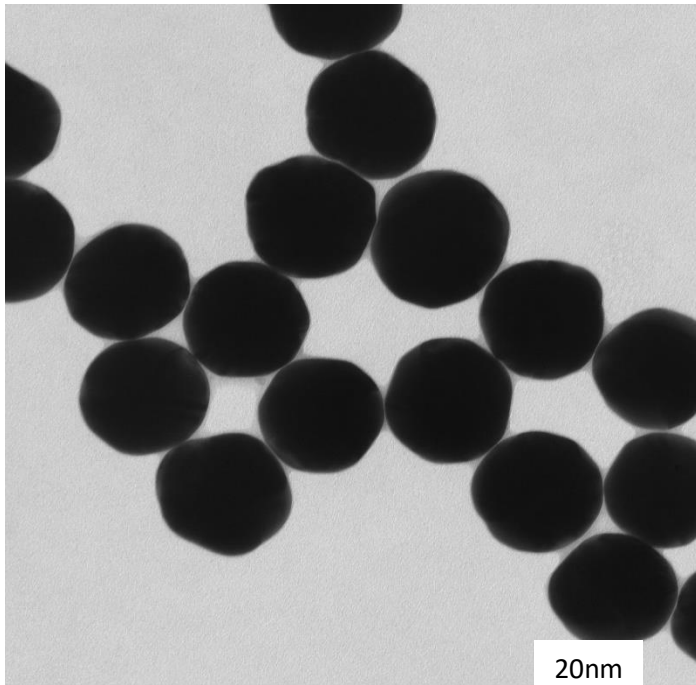
Instrumentation used for characterization

Diameter and size distribution:	Transmission Electron Microscope HITACHI H-7100
Mass concentration:	PerkinElmer NexION 2000P+ ICP-MS
Spectral properties:	PerkinElmer Lambda 365+ UV-Visible Spectrophotometer
Hydrodynamic Diameter and Zeta Potential:	Malvern Zetasizer

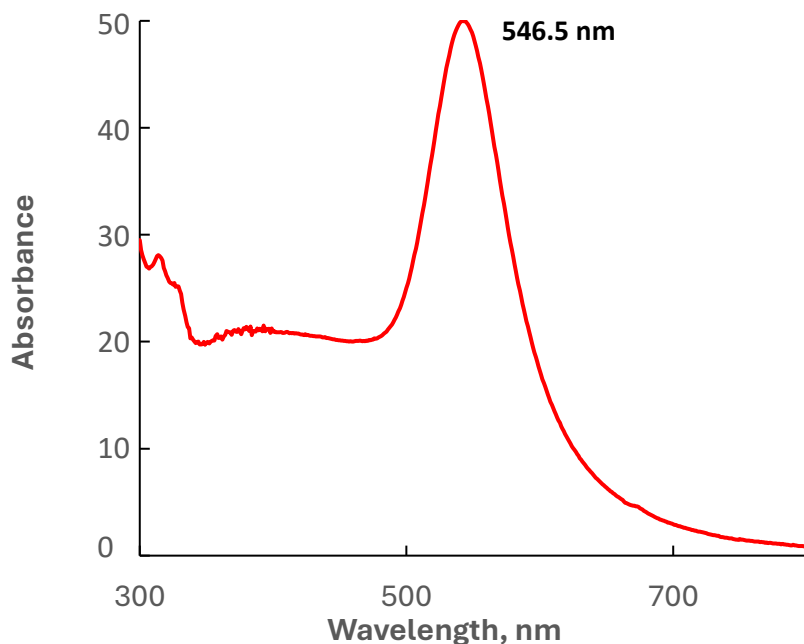
Shake before use. Store at 2-8°C away from light. DO NOT FREEZE

“Lateral-Flow-Easy” 80nm Gold Nano-Spheres

PEG-5K-COOH surface, OD=50



Optical Properties



Size Distribution

