

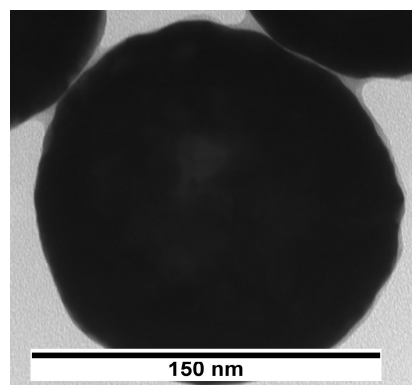
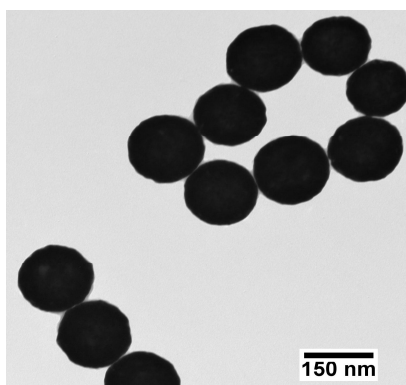
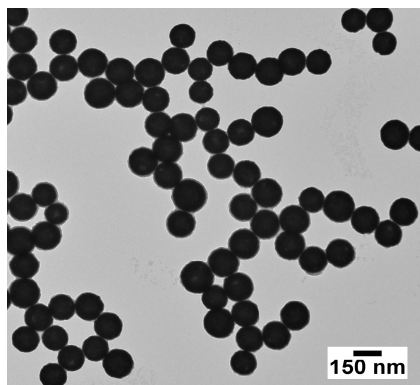
## 150 nm Gold Nanoshells, Carboxyl, 20 OD, BioReady™

Product Number: GSXR150

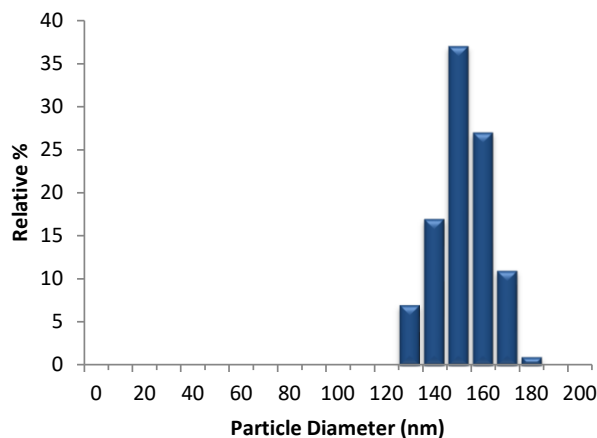
Lot Number: JMZ1606

	Specification	Value	Unit
Diameter ± Std.Dev (TEM*):	140-170 nm	157 ± 11	nm
Coefficient of Variation*:	≤ 15%	7.0	%
Particle Concentration (Calc'd)*:	Report	2.8E+10	particles/mL
Molar Particle Concentration:	Report	4.7E-11	particle # (mol/L)
Mass Concentration (Au):	Report	0.59	mg/mL
Hydrodynamic Diameter (DLS):	145-195 nm	164	nm

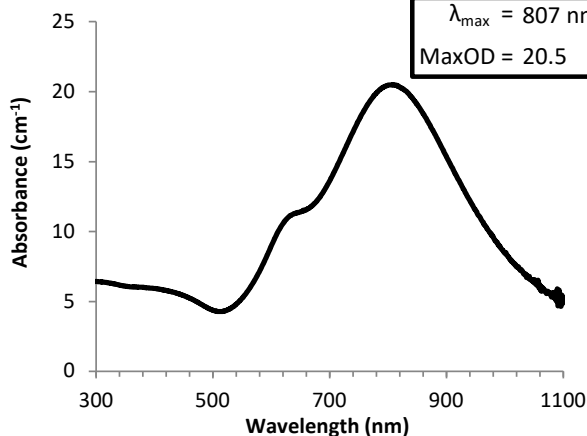
	Specification	Value	Unit
Surface Area (Calc'd):	Report	3.3	m <sup>2</sup> /g
Zeta Potential:	<-40 mV	-51	mV
Max OD**:	19.5 - 21.0	20.5	n/a
pH:	Report	8.3	n/a
Particle Surface:	Report	Carboxyl (-COOH)	
Solvent:	Report	Aqueous 0.02 mM Potassium Carbonate	



### Size Distribution



### Optical Properties



### Characterization Instrumentation

Diameter and Size Statistics:	JEOL 1010 Transmission Electron Microscope; ImageJ
Mass Concentration:	Thermo Fisher X Series 2 ICP-MS
Spectral Properties:	Agilent 8453 UV-Visible Spectrometer
Hydrodynamic Diameter/Zeta Potential:	Malvern Zetasizer Nano ZS
pH:	Mettler Toledo - InLab Routine Pro ISM

**Storage: 2-8 °C. DO NOT FREEZE.**

\*Particle size data is based on measurements of singlet particles only.\*

\*\* OD at time of initial QC testing is reported.\*\*