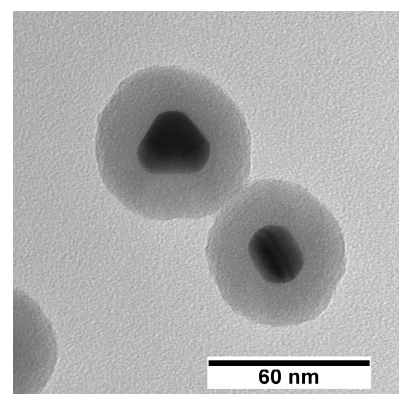
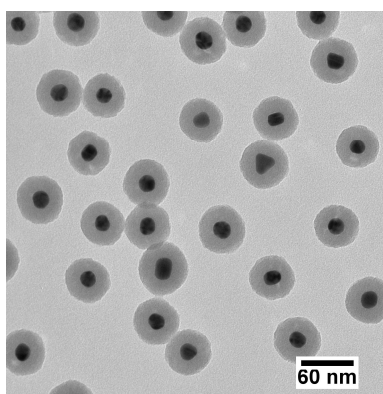
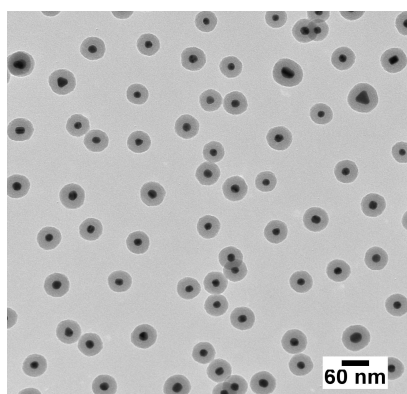


# Silica Shelled 20 nm Gold Nanospheres, Aminated, NanoXact™

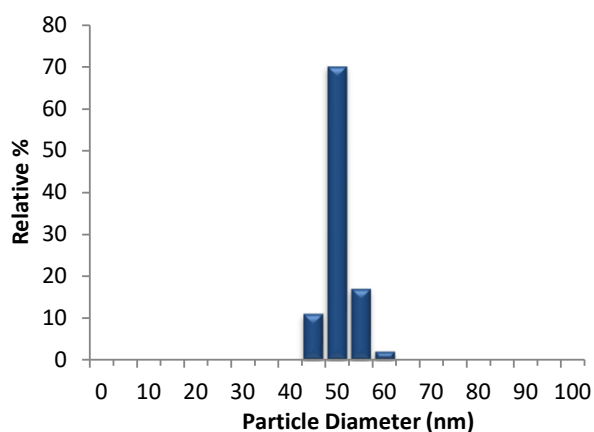
Product Number: AUAH20

Lot Number: JRO0174

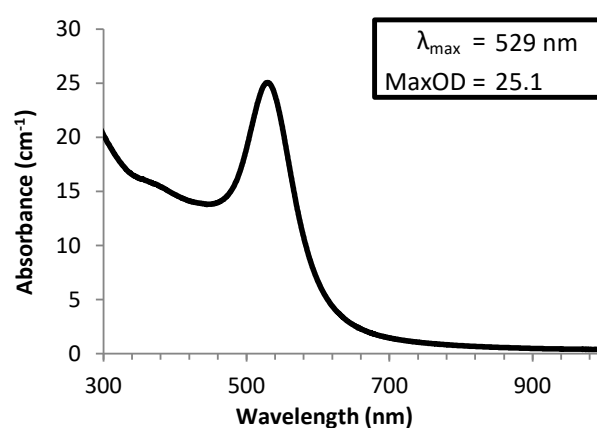
<b>Total Diameter ± Std.Dev (TEM):</b>	53.2 ± 2.6 nm	<b>Hydrodynamic Diameter:</b>	78 nm
<b>Coefficient of Variation:</b>	5.0 %	<b>Zeta Potential:</b>	+ 31.3 mV
<b>Core Diameter ± Std.Dev (TEM):</b>	19 ± 2 nm	<b>Zeta pH: 5.2</b>	<b>Zeta Solvent: 2 mM Acetate</b>
<b>Shell Thickness (TEM):</b>	17 nm	<b>Particle Surface:</b>	Aminated/Cationic
<b>Surface Area (Calc'd):</b>	37.9 m <sup>2</sup> /g	<b>Solvent:</b>	Ethanol
<b>Particle Concentration (Calc'd):</b>	1.5E+13 particles/mL	<b>Mass Concentration (Au):</b>	1.02 mg/mL



## Size Distribution



## Optical Properties



### Characterization Instrumentation

<b>Diameter and Size Statistics:</b>	JEOL 1010 Transmission Electron Microscope; Image J
<b>Mass Concentration:</b>	Thermo Fisher X Series 2 ICP-MS
<b>Spectral Properties:</b>	Agilent 8453 UV-Visible Spectrometer
<b>Hydrodynamic Diameter/Zeta Potential:</b>	Malvern Zetasizer Nano ZS
<b>pH:</b>	Horiba - Laqua Twin pH Meter

Shake vigorously before use. Bath sonicate if needed. Storage: 2-8 °C. DO NOT FREEZE.

To minimize ethanol evaporation, store in a cool place, minimize bottle head space and cap tightly.