

NANOPARTz™

The gold nanoparticle for nanotechnology

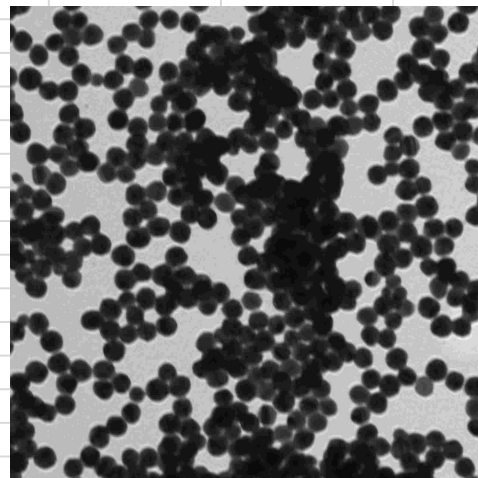
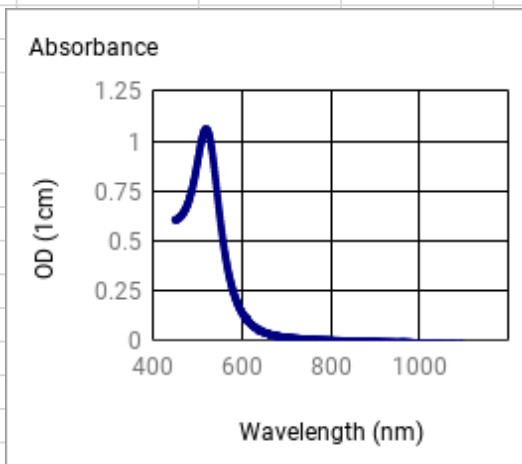
Certificate of Analysis

Product Family	Accurate Spherical Gold Nanoparticles
Product Number	A11-20-NPC-DIH-Bulk
Lot #	SPD513N
Form	Gold Colloid
Capping Agent	NPC
Solution	18 MEG DI water
Source	SPD513N

Diameter	nm	measured average	TEM, DLS, UVVIS	20
SPR Abs	OD	measured	UV/VIS	1.1
PDI	stddev/size	measured	TEM	4%
SPR Peak	nm	measured	UV/VIS	520
pH		measured	Orion	7
Zeta Potential	mV	measured	DLS	-29
Concentration	nps/mL	calc		6.82E+11
Wt. conc.	mg/mL	calc		0.06
ppm		calc		55
Wt. %	%	calc		0.0055%
Molarity	uM	calc		1.14E-03
Molar Ext.	M-1cm-1	calc		9.67E+08

Date	8/17/2018
Exp Date	2/13/2019

Alex Schoen, Manager Quality Control



A11-20 SPD513N.jpg
Cal: 0.262055 nm/pix
2:46:51 p 08/20/14

100 nm
HV=80.0kV
Direct Mag: 52000x
Phillips CM100