

NANOPARTz™

The gold nanoparticle for nanotechnology

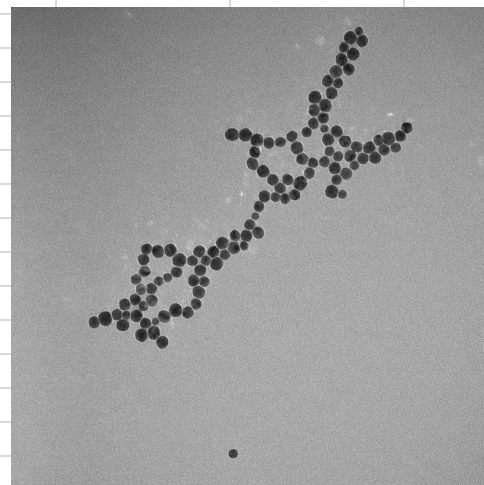
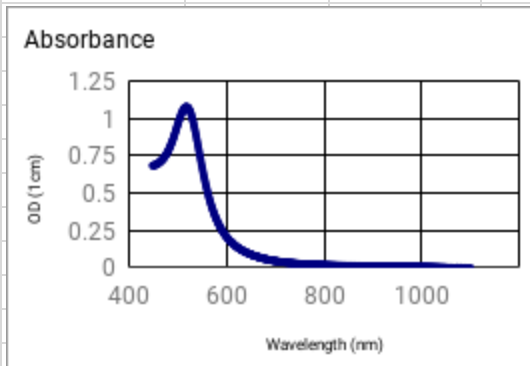
Certificate of Analysis

Product Family	Accurate Spherical Gold Nanoparticles
Product Number	A11-15-NPC-DIH-Bulk
Lot #	11H80
Form	Gold Colloid
Capping Agent	Nanopartz Carboxylic Acid
Solution	18MEG DI Water
Source	11H80

Diameter	nm	measured average	TEM, UVVIS	15
SPR Abs	OD	measured	UV/VIS	1
PDI	stddev/size	measured	TEM	10%
SPR Peak	nm	measured	UV/VIS	520
pH		measured	Orion	7
Zeta Potential	mV	measured	DLS	-32
Concentration	nps/mL	calc		1.47E+12
Wt. conc.	mg/mL	calc		0.05
ppm		calc		50
Wt. %	%	calc		0.0050%
Molarity	uM	calc		2.45E-03
Molar Ext.	M-1cm-1	calc		4.08E+08

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

Alex Schoen, Manager
Quality Control



11880_390
Cal: 0.552481 nm/pix
2.01.58 0W 1/12/2018

500 nm
HV:220.0kV
Direct Mag: 180000x
AMT Camera System