

NANOPARTz™

The gold nanoparticle for nanotechnology

Certificate of Analysis

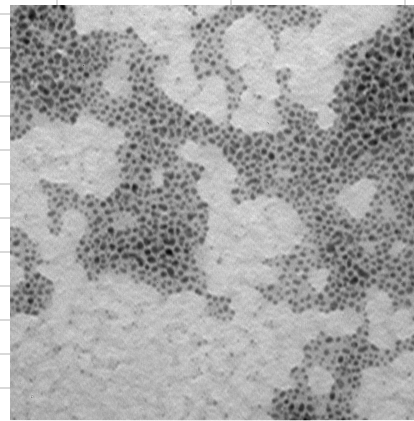
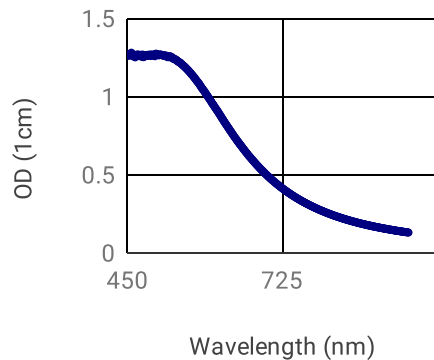
Product Family	Accurate Spherical Gold Nanoparticles
Product Number	A11-3-CIT-DIH-1-10
Lot #	SPEC
Form	Gold Colloid
Capping Agent	Citrate
Solution	18MEG DI Water
Source	SPA229N

Diameter	nm	measured	TEM	3.0
SPR Abs	OD	measured	UV/VIS	1.2
PDI	stddev/size	measured	TEM	25%
SPR Peak	nm	measured	UV/VIS	505
pH		measured	Orion	9
Zeta Potential	mV	measured	DLS	-35
Concentration	np/mL	calc		2.21E+14
Wt. conc.	mg/mL	calc		0.06
ppm		calc		60
Wt. %	%	calc		0.0060%
Molarity	uM	calc		3.68E-01
Molar Ext.	M-1cm-1	calc		3.26E+06
Citrate	mM	measured		10
Volume	mL	measured		10

Date	10/4/2019
Exp Date	4/1/2020

Alex Schoen, Manager
Quality Control

Absorbance



SPA229 105009x-1.tif
Cal: 0.134517 nm/pix
11:00:48 a 07/15/11

20 nm
JIP-84.02V
Direct Mag: 105000x