

NANOPARTz™

The gold nanoparticle for nanotechnology

Certificate of Analysis

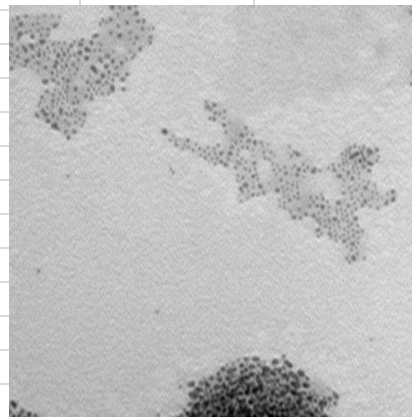
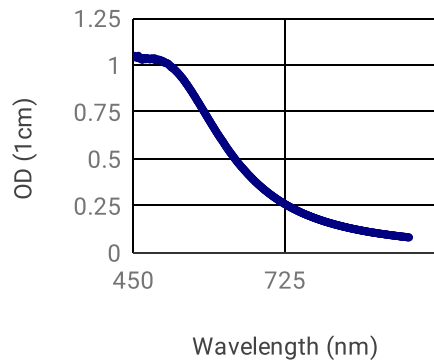
Product Family	Accurate Spherical Gold Nanoparticles
Product Number	A11-4-CIT-DIH-1-10
Lot #	SPEC
Form	Gold Colloid
Capping Agent	Citrate
Solution	18MEG DI Water
Source	SPA240

Diameter	nm	measured	TEM	4.0
SPR Abs	OD	measured	UV/VIS	1.2
PDI	stddev/size	measured	TEM	20%
SPR Peak	nm	measured	UV/VIS	505
pH		measured	Orion	9
Zeta Potential	mV	measured	DLS	-35
Concentration	mps/mL	calc		9.31E+13
Wt. conc.	mg/mL	calc		0.06
ppm		calc		60
Wt. %	%	calc		0.0060%
Molarity	uM	calc		1.55E-01
Molar Ext.	M-1cm-1	calc		7.74E+06
Citrate	mM	measured		5
Volume	mL	measured		10

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

Alex Schoen, Manager
Quality Control

Absorbance



SPA240 105000x-3.114
Col: 0.134517 nm/pix
11:18:26 a 07/15/11

20 nm
HV=80.0kV
Direct Mag: 105000x