	NI	Λ Λ Λ	PAR	TM		
		4 I N 🧡	PAN			
			ticle for nanotechn			
				3,		
Certificate	of Analys	is				
Product Family		Accurate Sph	erical Gold Nan	oparticles		
Product Number		A11-100-CIT-DIH-1-100				
Lot #		SPEC				
Form		Spherical Gold Nanoparticles				
Capping Agent		Citrate				
Solution		18MEG DI Water				
Source		11H131				
Diameter	nm	measured average	TEM, DLS, UVVIS	100		
SPR Abs	OD	measured	UV/VIS	1		
PDI	stddev/size		TEM	3%		
SPR Peak	nm	measured	UV/VIS	565		
рН		measured	Orion	7		
Zeta Potential	mV	measured	DLS	-38		
Concentration	nps/mL	calc		4.96E+09		
Wt. conc.	mg/mL	calc		0.05		
ppm		calc		50		
Wt. %	%	calc		0.0050%		
Molarity	uM	calc		8.27E-06		
Molar Ext.	M-1cm-1	calc		1.21E+11		
Citrate	mM	measured		3		
Volume	mL	measured		100		
Date				10/4/2019		
Exp Date				4/1/2020		
	•					
Alex Schoen, M	anager					
Quality Control						
				LIII		
Absorbance (OD)				ITYY	YY	
1	Λ				TYTY	
	/\				Y	
0.75	/ \	1			Y	
<u>§</u> 0.5		<u> </u>		LITY	Y	
0.0 (1cm)					Y	
0.25						
0.20				0000	COY	
0					TYY	
400 PO	00 100	800 000 000 1	00		A THE	
No So	0 10	0- 0- 0- 1		744		
1	Wavelengt	h (nm)	11H131-1.jpg Cal: 0.647415 mm/pix 12:46:68 PM 5/11/2018		100 nm NV=100.0kV Direct Mag: 98000x	