	N.	ΔΝΙ🧧	PΔ	$RTz^{\scriptscriptstyleTM}$	
	Ţ	he gold nanopa	rticle for nanote	ecnnology	
Certificate	of Analys	sis			
	_				
Product Family		Accurate Sp	herical Gold N	Nanoparticles	
	Product Number		DIH-1-25		
Lot #		SPEC			
Form		Gold Colloid			
Capping Agent		Citrate			
Solution		18 MEG DI water			
Source		11H129			
		measured	TEM, DLS,		
Diameter	nm	average	UVVIS	60	
SPR Abs	OD	measured	UV/VIS	1	
PDI	stddev/size		TEM	5%	
SPR Peak	nm	measured	UV/VIS	536	
рН		measured	Orion	7	
Zeta Potential	mV	measured	DLS	-34	
Concentration	nps/mL	calc		2.30E+10	
Wt. conc.	mg/mL	calc		0.05	
ppm	0/	calc		50	
Wt. %	%	calc		0.0050%	
Molarity Molar Ext.	uM M-1cm-1	calc		3.83E-05 2.61E+10	
Citrate	mM	measured		2.012+10	
Volume	mL	measured		25	
Volume	1111	measurea		20	
Date				10/4/2019	
Exp Date				4/1/2020	
Alex Schoen, M	lanager Qua	lity Control			
Absorbance					
1.25					
1					
	Λ				
(E) 0.75	/\				
0.75 OD (1cm)	Д				
9 00-					
0.25					
0 _		1055			
400	600 80	00 1000			
	14/01/01/01	ath (nm)	11/1100	.ipq	
	waveien	gth (nm)	Cal: 0 4: 55: 5:	.002115 ym/pix 3 PM 11/2/2017	500 nm HV=100.0kV Dixect Mag: 30000x AMT Camera System