

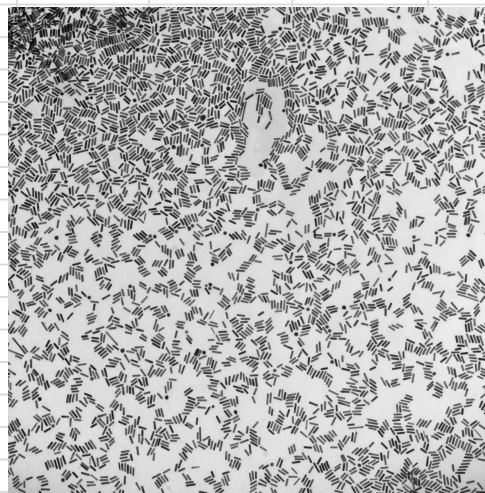
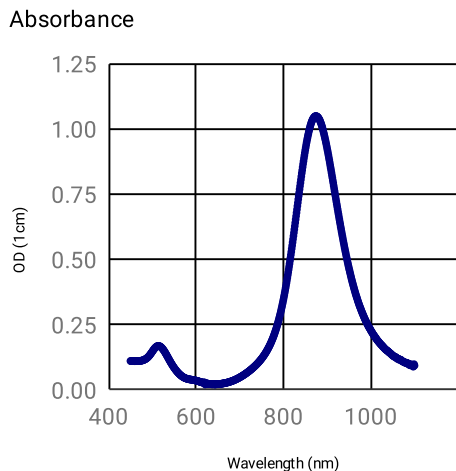
# NANOPARTZ™

The gold nanoparticle for nanotechnology

## Certificate of Analysis

Product Family	Nanopartz Gold Nanorods			
Product Number	A12-25-850-CTAB-DIH-1-25			
Lot #	12L486F-12658			
Form	Gold Colloid			
Capping Agent	CTAB			
Solution	18MEG DI Water			
Source	12H186			
SPR Peak	nm	measured	UV/VIS	860
SPR Abs	OD	measured	UV/VIS	1.1
LSPR Peak	nm	measured	UV/VIS	514
LSPR Abs	OD	measured	UV/VIS	0.15
pH		measured	Expt.	7
Zeta Potential	mV	measured	DLS	32
Diameter	nm	measured	TEM	25
Length	nm	measured	TEM	93
Aspect Ratio		calc		3.7
Concentration	nps/mL	calc		6.9E+10
Wt. conc.	mg/mL	calc		0.055
Concentration	ppm	calc		55
Wt %	%	calc		0.0055%
Molarity	nM	calc		0.114
Molar Ext.	M-1cm-1	calc		9.6E+09
CTAB	mM	measured		5
Volume	mL	measured		25
Date				9/15/2023
Exp Date				3/13/2024

Alex Schoen, Manager Quality Control



122186.jpg  
 Cnt: 0.002759 nm/pix  
 11:41:23 AM 8/4/2017

200 nm  
 HV=80.0kV  
 Direct Mag: 2300x  
 APT Camera System