

# NANOPARTz™

The gold nanoparticle for nanotechnology

## Certificate of Analysis

|                |                        |
|----------------|------------------------|
| Product Family | Nanopartz Gold Nanorod |
| Product Number | A12-50-800-CTAB        |
| Lot #          | RPB164BD               |
| Form           | Gold Colloid           |
| Capping Agent  | CTAB                   |
| Solution       | 18MEG DI Water         |

|                |        |          |        |         |
|----------------|--------|----------|--------|---------|
| SPR Peak       | nm     | measured | UV/VIS | 825     |
| SPR Abs        | OD     | measured | UV/VIS | 1.1     |
| LSPR Peak      | nm     | measured | UV/VIS | 520     |
| LSPR Abs       | OD     | measured | UV/VIS | 0.3     |
| pH             |        | measured | Expt.  | 6       |
| Zeta Potential | mV     | measured | DLS    | 40      |
| Diameter       | nm     | measured | TEM    | 50      |
| Length         | nm     | measured | TEM    | 160     |
| Aspect Ratio   |        | calc     |        | 3.2     |
| Concentration  | nps/mL | calc     |        | 1.0E+10 |
| Concentration  | mg/mL  | calc     |        | 0.055   |
| CTAB           | mM     | measured |        | 3       |

Date 1/6/2017

Exp Date 7/5/2017

Alex Schoen, Manager Quality Control

