

# NANOPARTz™

The gold nanoparticle for nanotechnology

## Certificate of Analysis

|                |                                       |
|----------------|---------------------------------------|
| Product Family | Accurate Spherical Gold Nanoparticles |
| Product Number | A11-200-CIT-DIH-1-25                  |
| Lot #          | 11N618-13671                          |
| Form           | Gold Colloid                          |
| Capping Agent  | Citrate                               |
| Solution       | 18MEG DI Water                        |
| Source         | 11Y161                                |

|                |             |                  |                 |          |
|----------------|-------------|------------------|-----------------|----------|
| Diameter       | nm          | measured average | TEM, DLS, UVVIS | 200      |
| SPR Abs        | OD          | measured         | UV/VIS          | 1.2      |
| PDI            | stddev/size | measured         | TEM             | 3%       |
| SPR Peak       | nm          | measured         | UV/VIS          | 555/772  |
| pH             |             | measured         | Orion           | 7        |
| Zeta Potential | mV          | measured         | DLS             | -38      |
| Concentration  | nps/mL      | calc             |                 | 7.44E+08 |
| Wt. conc.      | mg/mL       | calc             |                 | 0.06     |
| ppm            |             | calc             |                 | 60       |
| Wt. %          | %           | calc             |                 | 0.0060%  |
| Molarity       | uM          | calc             |                 | 1.24E-06 |
| Molar Ext.     | M-1cm-1     | calc             |                 | 9.67E+11 |
| Citrate        | mM          | measured         |                 | 3        |
| Volume         | mL          | measured         |                 | 25       |

|          |           |
|----------|-----------|
| Date     | 1/11/2024 |
| Exp Date | 7/9/2024  |

Alex Schoen, Manager  
Quality Control

