|                    | IV            | 7 I <b>V</b>     |                    | $RTz^{\scriptscriptstyle{T}}$  |                   |
|--------------------|---------------|------------------|--------------------|--|-------------------|
|                    | 7             | he gold nanop    | article for nanote | echnology  |                   |
| Certificate        | of Analys     | is               |                    |  |                   |
| Certificate        | or 7 triarys  |                  |                    |  |                   |
| Product Family     |               | Accurate St      | oherical Gold N    | Janoparticles  |                   |
| Product Number     |               | A11-40-CIT       |                    | 10.10 par 110100   |                   |
| Lot #              |               | 11H104-136       |                    |  |                   |
| Form               |               | Gold Colloid     |                    |  |                   |
| Capping Agent      |               | Citrate          |                    |  |                   |
| Solution           |               | 18MEG DI         | Water              |  |                   |
| Source             |               | 11H104           |                    |  |                   |
|                    |               |                  | TEM DIO            |  |                   |
| Diameter           | nm            | measured average | TEM, DLS,<br>UVVIS | 40   |                   |
| SPR Abs            | OD            | measured         | UV/VIS             | 1  |                   |
| PDI                | stddev/size   |                  | TEM                | 9%   |                   |
| SPR Peak           | nm            | measured         | UV/VIS             | 528  |                   |
| рН                 |               | measured         | Orion              | 7  |                   |
| Zeta Potential     | mV            | measured         | DLS                | -33  |                   |
| Concentration      | nps/mL        | calc             |                    | 7.75E+10   |                   |
| Wt. conc.          | mg/mL         | calc             |                    | 0.05   |                   |
| ppm                |               | calc             |                    | 50   |                   |
| Wt. %              | %             | calc             |                    | 0.0050%  |                   |
| Molarity           | uM            | calc             |                    | 1.29E-04   |                   |
| Molar Ext.         | M-1cm-1       | calc             |                    | 7.74E+09   |                   |
| Citrate            | mM            | measured         |                    | 3  |                   |
| Volume             | mL            | measured         |                    | 25   |                   |
| Date               |               |                  |                    | 1/11/2024  |                   |
| Exp Date           |               |                  |                    | 7/9/2024   |                   |
| Alex Schoen, M     | Japager Oue   | lity Control     |                    |  |                   |
| Alex Schoen, iv    | ianagei Qua   | inty Control     |                    |  |                   |
| Absorbance         |               |                  | t t                |  |                   |
|                    |               |                  | 6.7                | one with the   |                   |
| 1.25               |               |                  |                    |  |                   |
| 1 –                |               |                  |                    |  |                   |
| 0.75               | $\Lambda$     |                  | 3.                 | A STATE OF THE STA | The Miller of the |
| 0.75<br>0.5<br>0.5 | M             |                  |                    |  |                   |
| 0.5                | $\mathcal{H}$ |                  |                    |  |                   |
| 0.25               |               |                  |                    | 97   | The second        |
| -                  |               |                  |                    |  |                   |
| 0 -                | 600 0         | 00 1000          |                    |  |                   |
| 400                | 600 8         | 00 1000          | 2                  |  |                   |
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