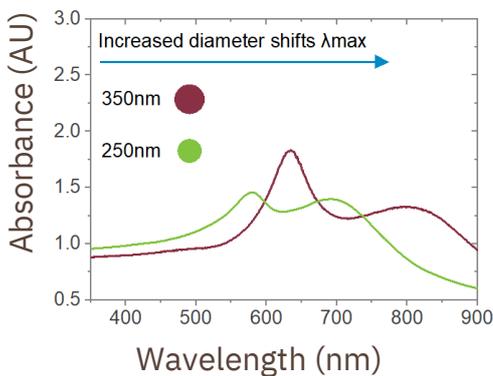
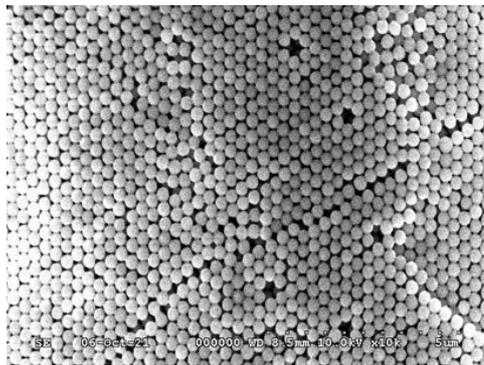


Glantreo produces highly monodispersed ($CV < 8\%$) Selenium nanoparticles (SeNP) in large batches with reproducibility in particle size, shape and dispersion. From an end application perspective (e.g., LFA), this consistency in production ensures more even antibody binding and greater reliability for conjugation, and therefore better consistency for your assay application. SEM imaging of the 350 nm particles illustrates the uniform nature of the Glantreo SeNP. Furthermore, UV vis profiles of particles agree with curves calculated for SeNP size using Mie scattering theory, indicating that samples are consistently monodisperse. Using Glantreo as an assured source of your Selenium nanoparticles can reduce assay development time, eliminate in-house production projects that have inherent development and manufacturing risks, and allow you to focus on leveraging your core competencies.

Effect of diameter on λ_{max}



SEM of 350 nm SeNP



Glantreo SeNP product



Typical properties of currently available Glantreo SeNP

| Product diameter | 250 nm SeNP | 350 nm SeNP |
|--|---|--------------|
| Applications | LFA tests, Agriculture, Anti-cancer, and more | |
| λ_{max} (nm) | 575 \pm 10 | 640 \pm 10 |
| Theoretical λ_{max} predicted by Mie scattering (nm) | 577 | 630 |
| Size %CV | <8% | |
| Optical Density (OD) | 19-21 | 19-21 |
| Zeta potential (mv) | -30 to -35 | -30 to -35 |
| Residual surfactants (ppm) | <20 | <20 |
| Conductivity ($mS\text{cm}^{-1}$) | 3-6 | 3-6 |
| pH | 4.5-7 | 4.5-7 |
| Presentation matrix | Water | |
| Capping agent | None | |
| Shelf life | 3 months at OD 20 | |
| Storage | 2-8°C (unsuitable for freezing) | |
| Quantity | 2 mL to multi-litre quantities | |

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DISCLAIMER: The information set forth in this Product Data Sheet represents typical properties of the product described; the information and the typical values are not specifications. Glantreo Limited makes no representation or warranty concerning the products, expressed or implied, by this Product Data Sheet.