

The bright red colour of selenium colloid solutions makes them ideal for use as staining reagents to label proteins of interest in immunoassays. Glantreo Selenium nanoparticles (SeNP) offer an alternative to gold nanoparticles (AuNP) and latex in lateral flow antigen (LFA) tests. Glantreo produces highly monodispersed (CV < 6%) Selenium nanoparticles (SeNP) in large batches with reproducibility in particle size, shape, and dispersion. 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.

Glantreo SeNP in LFA tests



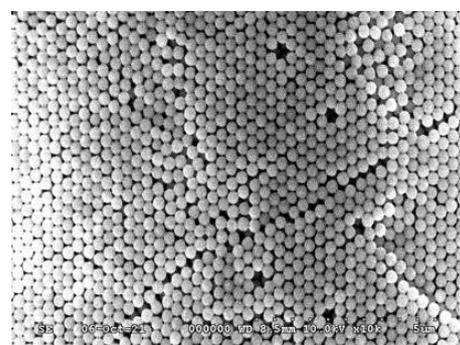
Negative 0.1 0.4 4
ng/mL rNP SARS-CoV-2

Advantages of Glantreo SeNP for LFA*

- Batches are consistent and robust
- Less nonspecific binding than latex, leading to cleaner backgrounds
- Compatible with passive conjugation
- No sonication step required
- 10 times less antibody required compared to latex or AuNP

* tests confirmed by independent testing at OD20

SEM of 350 nm



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 ± 10	640 ± 10
Size %CV	<8%	
Optical Density (OD)	OD2 & OD20	OD2 & OD20
Zeta potential (mv)	-30 to -35	-30 to -35
Residual surfactants (ppm)	<20	<20
Conductivity (mScm ⁻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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